STRESS AT WORK: A STUDY INVOLVING POSITIVE AND NEGATIVE COMPONENTS OF PSYCHOLOGICAL FEMININITY AND MASCULINITY

LYNN ELIZABETH DRYBURGH

Submitted in partial fulfilment
of the requirements for a
Master of Science Degree.

University of Canterbury,
Christchurch,
New Zealand.
1988

I dedicate this thesis to my loving parents,

Joy and Ron Schroder,

who always support me in

what ever I choose to do.

ACKNOWLEDGEMENT

I am indebted to many people, family and friends, who in one way or another made the completion of this thesis easier. I would like to thank Lindsay Dahlberg for his help with survey approval, Jocelyn Golding and James Gray for their assistance with survey distribution, and Bruce Jamieson for his guidance in the role of supervisor. I am very grateful to Paul Dryburgh for the availability of his home computer which made the drafting of these pages so much easier and Pru Dryburgh for her support and proof reading skills. I would like to thank Jo Ashton-Martyn, Philippa Jones and Graeme Payne for their valued continual support and friendship throughout this thesis and trying times.

I would like to express a special thankyou to all the participants of the survey, for they played a very important part in this thesis. Finally, thanks must go to Tim for his continual patience and support, without which this thesis may never have been completed.

LIST OF CONTENTS

Page

LIST OF TABLES AND FIGURES

Page

ABSTRACT

In an effort to clarify the social-psychological explanation of sex differences in work stress this thesis incorporates sex role theory into an investigation of job pressures of job holders in a banking organisation (n = 135). The psychological constructs of positive and negative, femininity and masculinity, are involved in the testing of five sex role models: the congruence model, the additive androgyny model, the interactive androgyny model, the differential androgyny model and the masculinity model.

This study sets out to isolate the job factors which are perceived as stressors by the sample as a whole and on the basis of job sectors. The general health status of the sample is examined in relation to the incidence of pressure and in contrast to other occupational stress studies. Masculinity and femininity scale scores are investigated and the five sex role models examined in terms of contribution of masculine and feminine attributes to the reportation of stressors in the work environment.

A survey questionnaire containing four sections, Job Pressures, Personal Description (Antill, Cunningham, Russell & Thompson, 1981), General Health Questionnaire (GHQ-12, Goldberg, 1972), and Background Information was utilised in the study. Fourteen stressors were isolated, 11 for the sample as a whole and three dependent on job sector. A

small positive relationship emerged between ill health and the incidence of pressure. In comparison to other occupational stress studies the sample appears to have a lower general health status. ANOVAs were used to test the differences between groups on the basis of sex role scale scores. The femininity-negative and masculinity-negative scales contributed significantly to stress scores, providing support for the additive androgyny model.

CHAPTER ONE: INTRODUCTION

Sex-of-subject differences are less pervasive than many have thought. Furthermore the amount of variance accounted for by gender, even when main effects are reliable, is typically small (Deaux, 1984; Maccoby & Jacklin, 1974). Among other problems sex-of-subject is descriptive rather than conceptual and dichotomous rather than continual (Deaux, 1977). As such it serves only as a gross marker in predicting individual differences.

In an effort to understand sex differences researchers in a variety of fields have recognised the limitations of sex as a psychological variable and have incorporated sex role theory into their investigations. Sex role theory acknowledges sex role stereotypes, that is, the existance of highly consensual norms and beliefs about the differing characteristics of men and women. Psychological differences between the sexes are not seen to be the result of biological destiny but are learned after birth through the sex role socialisation processes by which children learn to adopt, to some degree, a body of characteristics and behaviours socially ascribed to their gender (Antill, Cunningham, Russell & Thompson, 1981; Bem, 1977, 1981; Broverman, Broverman, Clarkson, Rosenkrantz & Vogel, 1970; Deaux, 1977; Powell, 1982; Spence & Helmreich, 1978; Spence, Helmreich & Holahan, 1979).

The role of women in society is radically changing in most western countries. The economic pressures of inflation, the influence of the women's movement, and the psychological 'need to develop one's self-identity' are

encouraging women to take a more active role outside the home, to pursue full time careers or education or participate more widely in society (Davidson & Cooper, 1986; Haw, 1982). Women are now living in a more career-orientated environment than previous generations and in many cases are working due to economic necessity. This is especially evident in the increases in the female labour force numbers and is consistent with later marriage, more childless marriages and changes in the time pattern commitment to child rearing.

In New Zealand labour force growth and change in total labour-force participation levels have varied markedly between males and females between 1961 and 1986. The male labour-force grew from 674,578 at the 1961 census to 935,049 at the 1986 census an increase of 260,471 or 37.7 percent. In contrast the female labour-force increased markedly from 240,134 to 669,981 a growth of 429,847 or 179.0 percent. In contrast to male labour-force participation, which decreased steadily during the intercensal period 1961-1986, female labour-force participation has increased rapidly. This has resulted in a marked change in the sex distribution within the labour force. At the 1961 census 26.3 percent of the total labour force were females but by the 1986 census this figure had nearly doubled to 41.7 percent (New Zealand Official Yearbook, 1987-1988).

Research over the past 25 years suggests that work may be a significant source of stress, and that stress is tied to serious consequences in regard to mental and physical ill health (Cooper & Marshall, 1976; Cline & Chosy, 1972; Haynes & Feinleib, 1980; House, 1974; Whitley, 1984). However "until recently, studies on work related stress either

excluded women as subjects or did not analyse sex differences" (Haw, 1982, p 132). This situation is improving (Ivancevich & Matteson, 1980; Jick & Mitz, 1985; Kessler & McRae, 1981).

In general, however, research on sex differences in work stress has equated sex role with gender. There has been little acknowledgement of feminine and masculine attributes or their interplay with gender in the examination of individual differences in the stress process within the sphere of paid employment (Gore & Mangione, 1983; Haw, 1982; Jick & Mitz, 1985; Rotheram & Weiner, 1983). It is hoped that the inclusion of sex role theory and models in this study of work stress will clarify the role of socialisation in the stress process, particularly in terms of perceived stress experiences and the influence of masculine and feminine attributes (Jick & Mitz, 1985; Whitley, 1984).

Studies on work-related stress and women tend to concern less specific factors of job environments than do studies concerning men (Haw, 1982). Specific variables such as the underutilisation of skills, lack of recognition for achievement, presence of deadlines and knowledge of career opportunities warrant investigation in work stress studies for both men and women.

Obtaining information on the stressors employees, both men and women, face in their working environments and their psycological attributes of masculinity and femininity enables the examination of stress sources and sex role models in the organisational environment. A group of bank employees at a similar level in the organisation structure were invited to participate in the survey research component of this thesis.

The balance of this thesis takes the following form. The next chapter reviews the literature on work stress, sex differences, sex role theory and measurement, and ends by looking at the literature available on the interplay of sex roles and work stress. Chapter three outlines the research methodology of this study and chapter four presents the results. Results focus on three main areas, job factors, general health and the sex role models.

CHAPTER TWO: REVIEW OF THE LITERATURE

A. WORK STRESS

(i) Introduction

Stress is a term derived from the technical sciences and indicates an excessive, detrimental overloading of objects. In the 1960's following developments in medical and psychological fields, the stress concept was granted a place in the field of work and organisational psychology under the label of 'organisational stress' (Kahn, Wolfe & Quinn, 1964).

Over the past decade increasing attention has been devoted to organisational stress (Corlett & Richardson, 1981; Gmelch, 1983; Haw, 1982; Ivancevich & Matteson, 1980; Jick & Mitz, 1985; Marshall & Cooper, 1979; Quick & Quick, 1984). Stress information and large volumes of literature appeal to a broad spectrum of readers - to academic researchers in applied and occupational psychology, occupational medicine, management, personnel etc - and to practitioners working in industry, the occupational medicine field, mental health specialists, social workers and others interested in the health of the individual worker.

Characteristic of the 20th century is the growing complexity of organisations, increased specialisation, more mutual interdependence and more complicated tasks. Organisations can make people prosper, but the opposite is also possible, people can be frustrated in their careers and fall ill because of bad working conditions (Winnubst, 1984).

> ... companies can hardly deny the significant impact they have on individuals' lives, and lifestyles. They demand, at a minimum, approximately one-third of the individual's waking time, determine their standard of living and main non-voluntary relationships; they significantly influence where they live geographically and what the future holds. They are, in sum, a major source of demands and constraints on their employees.
>
> Marshall & Cooper (1981 p. xiii).

Organisational stress has been suggested to be linked to physical and mental health (Cooper & Marshall, 1976; Whitley, 1984) coronary heart disease (Davidson & Cooper, 1986; House, 1974; Ivancevich & Matteson, 1980) absenteeism and turnover (Gupta & Beehr, 1979) and job performance and withdrawal behaviours (Jamal, 1984; McGrath, 1976).

Investigations of work stress have been conducted with varying occupational samples with the more recent inclusion of female subjects and predominantly female employment spheres: accountants (Touliatos, Bedeian, Mossholder & Barkman, 1984); public employees (Bryson, 1984); teachers (Galloway, Panckhurst, Boswell, Boswell & Green, 1984); medical, law and graduate students (Heins, Fahey & Leiden, 1984); nurses (Posner, Lester & Leitner, 1984); clergymen and clergywomen (Richmond, Rayburn & Rogers, 1985); engineers (Keenan & Newton, 1985); and mass media professionals (Fischer, 1985).

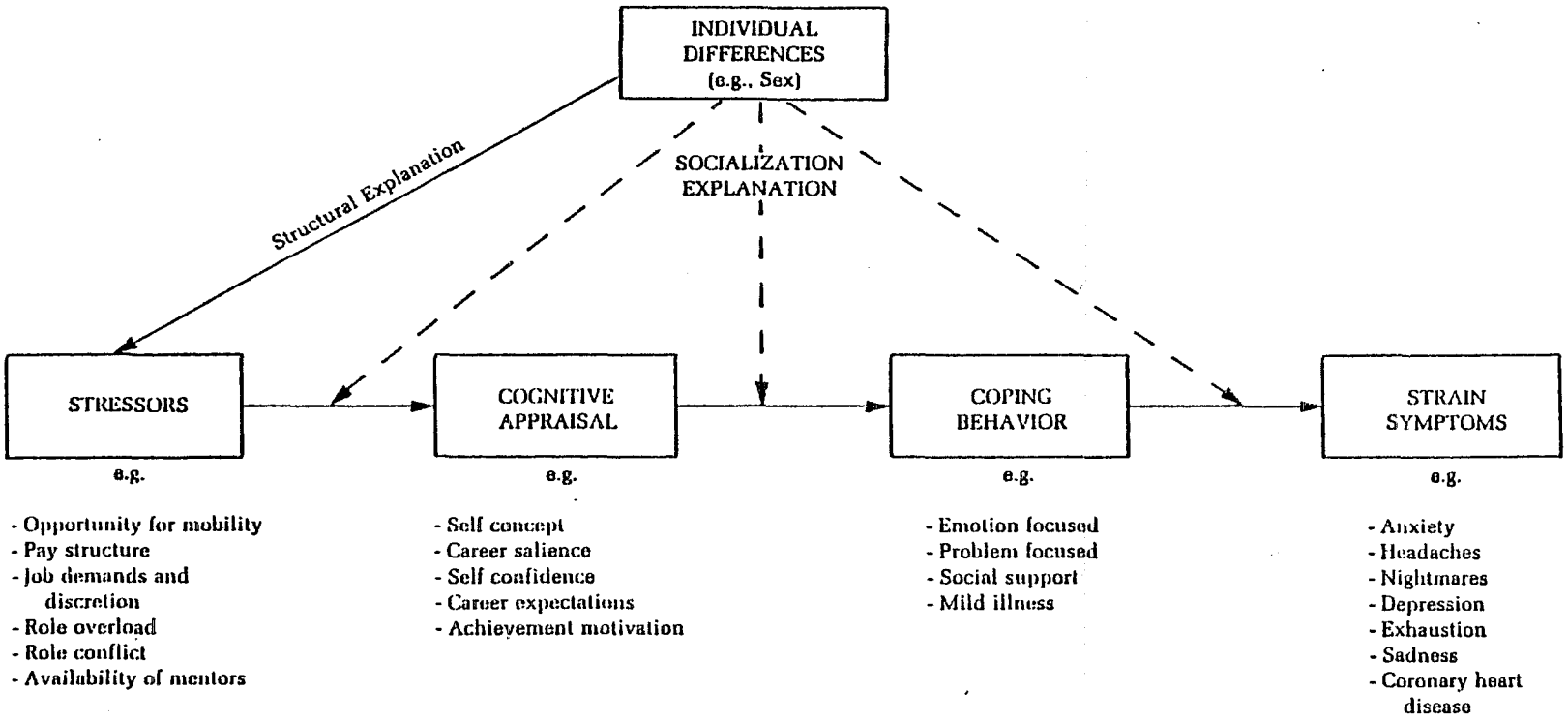
There are many models of stress in the literature. Stress has been conceptualised as a stimuli (Winnubst, 1984), as a first level outcome (Parker & De Cotiis, 1983),

as a resultant state (Fraser, 1983), and as a process (French & Caplan, 1972; Kahn, 1970; McGrath, 1976). The author here considers stress as a process, as this is most often utilised in studies of organisation stress. Jick and Mitz (1985) present a useful rudimentary model of work stress, a model based on McGrath (1976) that places emphasis on the individual. As shown in Figure 1, the stress process begins with situations, events or other sources of stress (stressors) which are interpreted and evaluated with respect to what is at stake (cognitive appraisal). An individual will then try to cope with or alter the stress-provoking conditions (coping behaviour) in order to mitigate the magnifestation of psychological, behavioural, or physiological strain symptoms. The conceptualisation of individual differences here suggests that individuals are likely to be exposed to different stressors and that the relationships between stressors and cognitive appraisal, appraisal and coping, and coping and strain symptoms may be moderated by individual differences.

Although there is a popular tendency to over emphasise the negative effects of stress can have beneficial consequences. Positive stress (eustress) is the desirable, healthy, constructive outcome of any stress response and may involve challenge, growth or adaptability. Negative stress (distress) is the undesirable, unhealthy, destructive outcome of any stress response and may involve alcohol and drug abuse, heart disease or depression (Quick & Quick, 1984). This duality of stress is well illustrated by the Chinese representation of stress by the characters denoting 'opportunity' and 'danger'.

The major focus of occupational or organisational stress

FIGURE 1. Individual Differences in the Stress Process (Jick, & Mitz, 1985).



investigations is the interaction of the worker and stressors in the work environment. Researchers have attempted to isolate stressors such as role conflict (French & Caplan, 1972; Rotheram & Weiner, 1983), organisational climate (Marshall & Cooper, 1979), time pressure, relationships at work, career development (Parker & De Cotiis, 1983), time and/or efforts wasted (Weiss, Ilgen & Sharbaugh, 1982), and resource inadequacy (Jamal, 1984). The common potential sources of stress are summarised in Table 1 reproduced from Corlett and Richardson (1981). Similar lists have been drawn up by Marshall and Cooper (1979), Ivancevich and Matteson (1980) and others.

Fourteen potential work stress dimensions have been selected by the author for inclusion in the survey research on work stress. They are job ambiguity, role conflict, quantitative overload, qualitative overload, underload, time management, career development, organisational structure, environmental conditions, communication, feeling isolated, individual identity, discrimination and sexual harassment.

When individuals do not understand what is expected of them in their job or have inadequate knowledge about their work roles in terms of authority and responsibilities, job ambiguity is likely to occur and act as a source of stress (Ivancevich & Matteson, 1980). Receiving conflicting demands from two or more people, or experiencing inconsistency in acceptable behaviours on the job or working on what the individual regards as unnecessary tasks or projects can cause what is known as role conflict (Rotheram & Weiner, 1983).

Work loads or volumes are of particular importance to all workers. Excessive demands or overload may be both

TABLE 1

Sources of Stress at Work (Corlett & Richardson, 1981).

1. Intrinsic to Job
   - Too much work Qualitative
   - Quantitative
   - Too little work
   - Time Pressures/deadlines
   - Poor Physical working conditions
   - Mistakes
   - Too many decisions

2. Role in Organisation
   - Role ambiguity
   - Role conflict
   - Too little responsibility
   - No participation in decision
   - Responsibility for people
   - Responsibility for things
   - Lack of managerial support
   - Increasing standards of acceptable performance
   - Organisational boundaries

3. Relations within Organisation
   - Poor relations with boss
   - Poor relations colleagues and subordinates
   - Difficulties in delegating responsibility
   - Personality difficulties

4. Career Development
   - Over promotion
   - Under promotion
   - Lack of job security
   - Fear of redundancy/retirement
   - Fear of obsolenscence
   - Thwarted ambition
   - Sense of being trapped

5. Organisational Structure and Climate
   - Restrictions on behaviour eg. budgets
   - Lack of effective consultation and communication
   - Uncertainty about what is happening
   - No sense of belonging
   - Loss of identity
   - Office politics

6. Organisation Interface with Outside
   - Divided loyalties
   - Conflicts with family demands

7. Intrinsic to Individual
   - Personality (tolerence for ambiguity, stable self-concept, etc)
   - Inability to cope with change
   - Declining abilities
   - Lack of insight into own motivation and stress
   - Ill-equipped to deal with interpersonal problems
   - Fear of moving out of area of expertise

quantitative in the sense of having too much to do in the time available, or qualitative in the sense of having to act on inadequate information or accomplish a task for which the individual feels ill-prepared in terms of skills and abilities (Corlett & Richardson, 1981). An often overlooked form of organisation efficiency and job stressor is associated with underload resulting from people being placed in jobs which do not allow them to make full use of their skills or abilities. The job may become unchallenging and present opportunities for the manifestation of bordom. Paradoxically this may occur following promotion to positions which reduce or remove the opportunity to do the work for which the individual has been trained (Quick & Quick, 1984).

The measurement of time has become sophisticated over the past 100 years and the pace of life has increased. We are now experiencing what Winnubst (1984) described "the western time syndrome". Modern man sees time as a quantitative economic property, "time is money", time can be bought or wasted. Daily schedules, deadlines and the allocation of time to work tasks summate to a time management stressor in the work place. In conjunction with a faster pace of life people are also more interested in where they are heading in their careers. There is often the endeavour to grow and extend oneself within career development and the lack of information or opportunity to advance can also be stressful to the individual (Parker & De Cotiis, 1983).

Organisational constraints through the imposition of structures, rules and regulations can limit individuals sense of personal accomplishment and freedom. Indeed an

orgnisational structure can inhibit many good ideas from being expressed or implemented in the work setting and job holders can feel that they have little control over their own jobs (Corlett & Richardson, 1981). The basic environmental conditions at work can also act as a source of stress. The rights to a private work place, the noise levels or the standard of equipment for example may give rise to environmental related stress (Marshall & Cooper, 1979).

The degree of difficulty experienced in communicating with colleagues, supervisors and subordinates can present stress to many individuals. The lack of opportunity to receive feedback on performance and progress is also a component of communication stress (Parker & De Cotiis, 1983). People at work can experience the feeling of isolation. They may not be part of a close-knit group and find that they receive little support from colleagues and this can also result in stress. Similarily, individual identity can be a stress dimension. Being trapped by the system or being a small cog in the big machine minimises the importance of the individual (Corlett & Richardson, 1981). Two dimensions of inequality have been included: discrimination and sexual harassment. These can both be stress provoking. Equality is sought by most employees in the recognition of their efforts and the opportunities for training, promotion and career development (Jick & Mitz, 1985; Powell, 1982).

Moderating variables such as self esteem (Ivancevich & Matteson, 1980; Kasal & Cobb, 1970), locus of control orientation (Fuqua & Courture, 1986; Marino & White, 1985), Type A behaviour (Davidson & Cooper, 1986; Quick & Quick,

1984), social support (Payne, 1980), and professional and organisational committment (Jamal, 1984) have also been studied in conjunction with stress.

What is negatively stressful for one person may in turn be positively stressful for another. The cognitive appraisal of stressors and the coping techniques employed are entirely peculiar to the individual as are the possible strain outcomes to the stress process (Firth, 1985). The study of stress therefore entails investigation at the individual level often relying on self report data.

Individual strain is the degree of physiological, psychological and/or behavioural deviation from an individual's normal functioning, resulting from a stressful event or series of events (Quick & Quick, 1984). The manifestations of stress are commonly measured by a health inventory such as the General Health Questionnaire (GHQ-12, Goldberg, 1972). The GHQ-12 is concerned with two major features; the inability to carry out one's normal healthy functions and the appearance of new reactions of a distressing nature. Studies have shown that the more stress a person experiences, the more health problems one can expect to be reported (Cline & Chosy, 1972, Marx, Gavrity & Barnes, 1975) although this is not always the case (Bryson, 1984). The GHQ-12 is reported to have high internal consistency, a unidimensional factor structure (Banks, 1983; Banks, Clegg, Jackson, Kemp, Stafford & Wall, 1980), and has been utilised in a number of occupational studies often in conjunction with employed and unemployed group comparisons of work group redesign. See Table 2.

(ii)Sex Differences

In conjunction with organisational variables it is

TABLE 2

Means and Standard Deviations of the General Health Questionnaire (GHQ-12, Goldberg, 1972) Reported in Occupational Studies.

Sample	Mean	sd	n
16 year old RSL[a] employed males*	7.86	4.26	241
Employed young people 1979#	8.16	4.61	553
Female Engineering employees*	8.53	3.65	83
Employed young people 1978#	8.56	4.95	432
Male engineering employees*	8.80	4.02	552
RSL 1978+	8.85	5.17	779
Further education young people 1978#	9.00	5.24	81
Further education young people 1979#	9.30	8.63	69
RSL 1979+	9.41	5.56	647
16 year old RSL employeed females*	9.71	5.66	190
Active life style unemployed males^	10.75	8.44	23
Social life style unemployed males^	12.03	7.67	30
Unemployed young people 1979#	13.64	6.41	64
16 year old RSL unemployed males*	13.84	6.61	37
Domestic lifestyle unemployed males^	14.20	8.79	39
16 year old RSL unemployed females*	14.25	7.01	44
Unemployed young people 1978#	14.88	6.93	63
Unemployed male adults*	15.61	7.82	91
Passive life style unemployed males^	17.48	7.22	29

Note. a RSL = Recent School Leavers
* Banks, Clegg, Jackson, Kemp, Stafford, & Wall (1980)
\# Banks & Jackson (1982)
\+ Jackson, Stafford, Banks, & Warr (1983)
^ Kirkpatrick & Trew (1986)

The GHQ-12 is made up of 12 items. Responses are assigned the value 0, 1, 2, or 3 giving a maximum score of 36.

believed that individual differences may moderate the stress process (Jick & Mitz, 1985; Quick & Quick, 1984). Some individuals may be predisposed to the suggested stress related diseases such as coronary heart disease, diabetes mellitus, bronchial asthma, migraines and ulcers (Ivancevich & Matteson, 1980; Quick & Quick, 1984). Factors such as age, medical and family history, family situation, type of employment, and personality, may affect an individual's disposition to the experience of stress (Firth, 1985; French & Caplan, 1972).

A variety of personality characteristics have been examined as moderating variables in the stress process. For example the competitive overdrive, devotion to work and time urgency behaviour referred to a Type A (Ivancevich & Matteson, 1980; Quick & Quick, 1984), locus of control orientation (Chan, 1977; Krause & Stryker, 1984; Lefcourt, Martin & Salch, 1984), self-esteem (Kasl & Cobb, 1970; Ivancevich & Matteson, 1980) and less prominently tolerance for ambignity, anxiety, introversion/extroversion, flexibility/rigidity, and dogmatism (Quick & Quick, 1984). The emphasis of this paper is on sex differences and sex role differences.

Over the past two decades an increasing amount of attention has been paid to the impact of sex differences in the work place, largely as a result of the changing roles of women (Davidson & Cooper, 1986; Haw, 1982). An emerging area of interest is the different work stress experiences of men and women. In general, studies concerned with sex differences in work stress have found that females tend to report higher rates of psychological distress than males, and that males are more prone to severe physical illness

than females (Jick & Mitz, 1985). When considering stress related illness, being male is much riskier than being female. Death rates among all ages are higher for men, and women generallly have a longer life expectancy. There is some evidence however that suggests that males and females are 'catching up' with each other in physical symptoms. For example coronary heart disease among females below the age of 45, has been increasing as has the incidence of peptic ulcers among all females (Ivancevich & Matteson, 1980). Similary, Kessler and McRae (1981) report a narrowing of the gap between the two sexes in reported psychological distress over a 20 year period.

Gender differences in stress symptoms have been examined under three frameworks: the genetic-biological model, the structural model and the social-psychological model (Jick & Mitz, 1985). Briefly, the genetic-biological model, which most researchers tend to dismiss, proposes that inborn tendencies explain the patterns of sex differences in work stress symptoms. The structural model focuses on differences in work situations and the work roles of men and women. Here the disproporionate representation throughout the employment sectors and the frequent combination of major home and family responsibilities is seen to be disadvantageous for women. Thirdly, the social-psychological explanation focuses on the effect differential socialization of males and females has on how stress is perceived and what is or is not done to mitigate its impact.

The social-psychological explanation is adopted and examined in this present study. Generally, findings indicate that women are socialised to appraise stressful

events in a less confident manner than men, resulting in a higer incidence of stress symptoms, while men are less likely to interpret symptoms associated with depression and low well-being as problematic (Conkite & Moos, 1984; Crabbs, Black & Shelby, 1986; Davidson & Cooper, 1984; Jick & Mitz, 1985). Therefore, it is conceivable that although male and female symptoms are similar, they may only be interpreted as signs of strain by women. Studies also suggest that men experience more stressors as a result of being socialised to achieve in their careers and to be independent, learning as children that success as 'men' is a function of succeeding at work (Jick & Mitz, 1985).

Some unique sources of stress have been found for women. A basic conflict that many women face involves the conflict between the role of mother/homemaker/wife and the contemporary role of woman as a paid working person. Occupational stereotypes can provide stress through adherence to the traditional stereotype and undertaking an undesirable and unsatisfying job or by accepting a traditionally male occupation and feeling pressure to meet male stereotyped standards (Jick & Mitz, 1985). Sexuality conflicts present another form of stress for women. A woman can be avoided eg. overlooked when promotion opportunities arise or excluded from social intercourse on the basis of her sex, or face unwanted and repeated sexual advances (Powell, 1982).

The evidence for gender differences in socialisation as a contributing factor to the differential appraisal of stressors and coping with stress is far from conclusive. A major criticism of this body of research is that virtually all work stress studies dealing with sex differences have

made the 'implicit assumption that sex and sex role identity are equivalent: sex role stereotypes match gender' (Jick & Mitz, 1985 p.415). Researchers in a variety of fields have recognised the limitations of sex as a psychological variable (Deaux, 1984). Biological gender at best serves only as a gross indicator in predicting individual differences.

An excellent review of the general literature on sex differences by Deaux (1984) acknowledges the usefulness of sex role related research in many areas. According to sex role theory individuals are believed to possess sex roles that are a function of each individual's utilization of cultural expectations concerning masculinity and femininity. Regardless of an individuals biological sex determined at birth, a person may have a predominantely feminine sex role orientation, a predominately masculine sex role orientation or some kind of mixture of the two (Antill, et al., 1981; Bem, 1977, 1981; Spence, Helmreich & Stapp, 1975).

B. SEX ROLE THEORY AND MEASUREMENT

(i) Introduction

Sex role research has been formulated on the basis of the following two theoretical assumptions. Firstly, it assumes that cultures cluster attributes into two mutually exclusive categories on the basis of the two sexes and that these cultural expectations and perceptions are known by virtually all members of the culture. Secondly, individuals differ in the extent to which they utilise these cultural definitions as idealised standards of masculinity and femininity against which they evaluate their own and others'

personality and behaviour (Bem, 1977).

Initially masculinity and femininity were conceptualised as psychological 'opposites'. Constantinople (1973) reviews many of the psychometric scales intended to measure masculinity and femininity including those of the Minnesota Multiphasic Personality Inventory, the California Psychological Inventory and the Strong Vocational Interest Blank. Items were selected on the basis of clear sex differentiation in terms of social endorsement by males and by females. Each of the items assess masculinity and femininity such that one direction of response (i.e., true) is indicative of masculinity while the opposite direction of response (i.e., false) is indicative of femininity. Optimal favourable adjustment of an individual was assumed to be when sex role matched gender i.e., sex typing, feminine-females and masculine-males.

Research in the 1970's challenged these traditional assumptions of sex role theory, questioning the bipolar conceptualisation of femininity and masculinity and the hypothesised favourable adjustment associated with sex typing. Masculinity and femininity began to be operationalised as independent dimensions with items selected as 'socially desirable for men' and 'socially desirable for women' (BSRI:Bem Sex Role Inventory, Bem, 1974, 1977, 1981; PAQ:Personal Attributes Questionnaire, Spence et al., 1975; Spence & Helmreich, 1978). Optimal adjustment was now hypothesised in terms of the ability to combine masculine and feminine attributes regardless of biological gender.

In response to critiques on the reliance on only positive or socially desirable attributes in instruments,

Spence, Helmreich, and Holahan (1979) expanded the PAQ to include negative or socially undesirable characteristics. Later, Antill, Cunningham, Russell, and Thompson (1981) developed the Personal Description Questionnaire (PDQ) to measure masculinity (M) and femininity (F) with positively valued characteristics (M+, F+) and negatively valued characteristics (M-, F-). The PDQ contains two parallel forms, Form A and Form B. Developed from a large item pool encompassing Bem's (1974) original data pool, Gough and Heilbrun's (1965) 300-item Adjective Checklist, and Rosenkrantz, Vogel, Bee, Broverman, and Broverman's (1968) 122-item Sex Role Stereotype Questionnaire, and involving over 2400 Australian subjects, both Form A and Form B of the PDQ have been found psychometrically sound although Form A displays psychometric superiority (Antill et al., 1981; Farnill & Ball, 1985; Marsh & Meyers, 1986; Russell & Antill, 1984). Making the assumption of cultural similarity between Australia and New Zealand, Form A of the PDQ will be utilized in this investigation of sex roles and work stress. The other sex role measurement instruments have been formulated and developed in America and are therefore peculiar to the American culture (Bem, 1974; Constantinople, 1973; Gough & Heilbrun, 1965; Rosenkrantz et al., 1968; Spence et al., 1979).

(ii)Sex Role Models

In sex role research the most frequently studied criteria have been measures of psychological well-being, self concept and self esteem. In a meta-analytic review of empirical studies investigating the relationship between sex role orientation and psychological well-being three models

were evaluated; the congruence model, the androgyny model and the masculinity model (Whitley, 1984).

The congruence model has the largest history and holds that one's sense of well-being depends on one's sex role orientation being congruent with one's gender (Kagan cited in Whitley, 1984). The androgyny model proposes that persons with both masculine and feminine personality traits are more flexible and hence better adjusted psychologically than persons who are traditionally sex typed (Bem, 1974, 1977, 1981; Gilbert, 1981). The masculinity model, on the other hand, has evolved out of repeated failure to demonstrate empirically the superior adjustment of androgynous subjects over masculine subjects. It suggests that masculinity is the 'active ingredient' in the favourable adjustment of both masculine and androgynous people (Adams & Sherer, 1985; Antill & Cunningham, 1979). Implicit in the masculinity model is the assumption that femininity is 'inert', that it contributes little if anything to the adjustment of androgynous people nor does it detract.

The results of Whitley's (1984) analyses provide the strongest support for the masculinity model. Masculinity, regardless of gender, was found to have a moderately strong relationship with high general adjustment and lack of depression. Femininity was only found to have a small relationship with general adjustment, and no relationship was found with depression. These results are similar to those reported by Bassoff and Glass (1982) and Taylor and Hall (1982) in their descriptive studies and parallel findings for the relationship between sex role orientation and self esteem reported by Whitley (1983). It appears that

the masculinity model may emerge as the promising framework for the understanding and investigation of psychological well-being for both males and females.

Lack of empirical support for the additive effects of masculinity and femininity has lead to the development of two hybrids of the androgyny model; the interactive androgyny model and the differential androgyny model. The first proposes that the interaction of masculinity and femininity contributes significantly to the prediction of self concept or psychological well-being beyond the contribution of masculinity and femininity (Lubinski, Tellegan & Butcher, 1983). Little empirical support has been found for this interactive model. The differential androgyny model, the second hybrid, hypothesises that the relative contribution of masculinity and femininity will vary according to the specific facet (scale or dimension) of the criterion studied. This model posits that there will be a significant masculine-by-facet interaction and a significant feminine-by-facet interaction.

In a very recent study Marsh (1987) tested the five sex role models described above. Empirical support was obtained for the predictions of the differential androgyny model in his study of self concept. Some self concept scales were related to masculinity while other self concept scales were related to femininity. Marsh's study highlights the inadequacy of other sex role models to recognise the multi-dimensional nature of the criterion studied.

The five sex role models discussed here will be tested in this study of work stress. The inclusion of sex role theory may increase our understanding of gender influences in work stress (Jick & Mitz, 1985). This thesis

incorporates sex role theory into the study of work stress in order to clarify the social-psychological explanation of sex differences in occupational stress.

C. SEX ROLE AND WORK STRESS

A stereotypical male sex role orientation at work, the traditional male sphere, may be more likely to bring success, satisfaction, lower levels of work stress, and better health. However interpretation of androgyny theory would suggest that success, satisfaction and well-being at work are a function of both masculinity and femininity. Androgynous individuals would have a broader range of potential behaviour from which to select. They could be

> ... both assertive and compassionate, both instrumental and expressive, both masculine and feminine, depending upon the situational appropriateness of these various modalities ... an individual may even blend these complementary modalities in a single act, being able, for example, to fire an employee if the circumstances warrant it but with sensitivity for the human emotion that such an act inevitably produces.
>
> Bem (1977, p. 196).

A small body of research is emerging that examines sex role orientation and work stress. Several studies that have examined the relationships between sex role and Type A (coronary prone) behaviour, locus of control beliefs and self esteem in the work setting. Competitive overdrive,

devotion to work and time urgency are the predominant features of the Type A behaviour pattern or personality. Friedman and Rosenman (1974) define the Type A individual as an "action emotion complex" in which the individual is "aggresively involved in a chronic, incessant struggle to achieve more and more in less and less time, and if required to do so, against the opposing efforts of other things and other persons" (p.84). The complement to Type A is the Type B behaviour pattern characterised by a less harried, less competitive existence. Type B individuals are equally intelligent and may be just as ambitious as those who are Type A but they approach life in a more measured way (Quick & Quick, 1984). Research displays some support for the importance of Type A behaviour as a coronary heart disease risk factor associated with stress (Ivancevich & Matteson, 1980; Quick & Quick, 1984). In general results of Type A studies involving sex role orientation indicate that subjects with high masculinity scores obtain significantly higher Type A scores than subjects with fewer masculine traits (e.g., Chesney & Rosenman, 1980; Stevens, Pfost & Ackerman, 1984). There is also the suggestion that androgynous Type A's may be less at risk than masculine Type A's with the femininity factor offering some kind of buffer or coping mechanism (Grimm & Yarnold, 1985).

Studies of how individuals explain their performance or achievement have found that males are more likely to attribute their success to ability while females are more likely to use luck as an explanation for their success or failure (e.g., Deaux, White & Farris, 1975). These findings reported as sex differences may in fact reflect sex role style difference. Masculine-males have been found to

believe that their decisions and actions will influence what happens to them. This internal locus of control is thought to be benefical to the adjustment and well-being of the individual (Fuqua & Couture, 1986; Jones, Chernovetz & Hansson, 1978; Krause & Stryker, 1984; Lefcourt et al., 1984; Marino & White, 1985). A similar distinction is often absent among female subjects although Lee and Scheurer (1983) report the masculinity effect for both sexes in conjunction with internal locus of control orientations.

High levels of self esteem have been associated with greater confidence in one's ability to successfully deal with the environment and as a consequence lower levels of stress are experienced. Conversely low levels of self esteem may enhance or facilitate the production of negative stress consequences. Self esteem has been identified as a possible buffer against adverse stress reactions in occupational samples which indicate that coronary heart disease risk factors rise as self esteem declines (Kasl & Cobb, 1970; Ivancevich & Matteson, 1980).

The relationship of self esteem with sex role orientation has been less consistent. The masculine positive subscale (M+) of the PDQ has been found to be positively related to self esteem while the feminine negative subscale (F-) displayed a negative relationship, indicating a need to investigate both the positive and negative components of sex roles (Marsh & Meyers, 1986; Russell & Antill, 1984). Jones and Lambke (1985) examined the masculine and feminine stereotyped occupational choices of college females. They found that masculine-females choosing feminine-typed occupations and androgynous-females displayed higher levels of self esteem than

masculine-females with masculine-typed occupational choices. In another study both masculinity and femininity were associated with low levels of self esteem and lack of assertiveness (Ray & Lovejoy, 1984). In a study of sex roles and self esteem among adolescents, Cate and Sugawara (1986) suggest that for males gender may override the impact of sex role orientation, while among females the impact of sex role orientation may be accentuated.

The androgyny view that the integration of feminine and masculine qualities allows maximum flexibility, adaptiveness and well-being may not be supported in the employment sphere. Rotheram and Weiner (1983) found androgynous subjects experienced greater work stress than masculine or feminine subjects in their study of assistant professors. Wong, Kettlewell and Sproule (1985) studied the importance of masculinity for career achievement of women. Education level and masculinity scores were the only significant predictors of career achievement. The relationships of gender and sex role with the career decision making of management accountants are investigated a study by Keys (1985). Results indicate that both gender and sex role are significantly related to the various aspects of career decision making.

In examining the relationships between workaholism, sex and sex role among male and female attorneys, physicians, psychologists and therapists, Doefler and Kammer (1986) have found a significant sex-by-sex role interaction. Female workaholics displayed either a masculine or an androgynous sex role orientation which questions the advantages of both masculinity and androgyny for women. Wech (1983) looks at the effect of stress on the physical health of women of

various sex role orientations. Significant differences were reported between masculine and feminine subjects with masculine-women reporting fewer health problems. As Wech suggests this may be a result of sex role stereotyping involving self disclosure.

It remains feasible that the relative contribution of masculinity and femininity may differ systematically according to the dimension of stress studied, paralleling Marsh's (1987) self concept study. The differential androgyny model advances the general acceptance of the multi-dimensional nature of work stress. The use of a global work stress score may obscure the relative contribution of masculinity or femininity. Zeldow and Daugherty (1987) found effects for both masculinity and femininity in a study of the psychological adjustment of medical students. Masculinity was associated with self esteem, extroversion and confidence while femininity was associated with hedonistic capacity, sharing personal problems and alcohol consumption.

In summary, organisations are very dependent upon their human resources and therefore due emphasis must be placed upon the health and well-being of employees. Organisational stress can prove quite harmful to both the individual and the employing organisation with real detriments in attendance, health, stability and performance as possible results. Thus it is of interest to the organisation and the individuals to understand the pressures that face individuals in their working environments so that attempts can be made, where possible, to ease the strains in hope of a healthy, more active and productive set of human resources that enables the organisation to remain competitive in its

often hetic and changing environment. This isolation of stressors can enable organisations to take an active rather than passive stance in improving the quality of people's working lives.

Individual differences are seen to influence the stress process. Gender receives attention in stress research as an individual difference able to moderate the perception and appraisal of stressors. The work environment presents many potential stressors to both males and females, but with the acknowledgement of the limitations of sex as a psychological variable work stress research needs to draw upon the body of research that revolves around sex role theory. The differential appraisal of stress sources may not be as dependent on gender as once thought. Instead the differential appraisal of stressors may stem from the influence of masculinity and femininity attributes acquired through the process of socialisation.

On the basis of the literature reviewed in this chapter the author of this thesis proposes to include sex role theory in an examination of the stressors men and women face in their working environment. Thus the social-psychological explanation of sex differences in work related stress will be explored in terms of stressors and masculinity and femininity. The PDQ (Form A) designed and developed by Antill et al., (1981) will be utilised as the sex role measure i the survey component of this thesis. The PDQ reflects the developments in the sex role literature and contains both positive and negative scales of masculinity, femininity and social desirability. It has displayed strong psychometric properties and has been developed in a culture not too dissimilar to New Zealands. The masculine and

feminine scales of the PDQ will allow the evaluation of the sex role models that have emerged from sex role theory and research associated with psychological well-being: the congruence model, the androgyny model, the masculinity model, the interactive androgyny model and the differential androgyny model.

CHAPTER THREE: DESIGN AND METHODOLOGY

A. THE DESIGN

The purpose of this thesis is to identify and examine job factors which are perceived as stressors and evaluate sex role models in the area of work stress. In particular this thesis sets out to examine the relations between 14 potential job stress dimensions and four sex role scales (F+, F-, M+, M-) with respect to theoreticial sex role models.

A survey questionnaire is designed to extract the information required from a group of bank employees. Results with focus on three main areas. Firstly, job factors which are perceived as stressors and their associated effect will be examined for the sample as a whole and on the basis of job sectors. Secondly, the general health of the sample will be examined in relation to the incidence of stressors and in contrast to other occupational stress studies. Finally, the five sex role models will be evaluated in terms of the relative contribution of masculine and feminine attributes to the perception of stressors in the work environment.

B. THE SAMPLE

(i) Introduction

The Bank of New Zealand (BNZ) operates over 230 branches throughout New Zealand. The recent de-regulation of the banking field, rapidly changing financial markets and the

implementation of progressive computer technologies: computer processing, VISA, automatic tellers, Electronic Funds Transfer Point of Sale (EFTPOS) and the new semi-automated bank (Readibank); has created a very dynamic and competitive environment for bank employees.

Within the Wellington District of the BNZ 200 job incumbents at grade three and four were approached to participate in this survey. Salary ranges for these two levels are $15 916 - $21 634 and $18 074 - $24 871, respectively. In order to preserve anonymity respondents were not required to state their specific job titles but to indicate their grade level and job sector within the banking field. The following job sectors cover the job positions:

Administration - covering general auditing of expense accounts and money transactions at the branch level and revision of staff records. Job titles include General Clerk, Second Officer, Checking Officer and Ledger Supervisor.

Typing - involving the general secretarial and administrative duties of Typists sometimes including miscellaneous clerical tasks.

Customer Services - involving receiving lodgements, opening and closing of accounts, cashing items, reconciliation of daily transactions and cash holdings for personal and commercial customers. Job titles here include Head Teller, Term Deposits Clerk, Customer Services Officer and Investments Clerk.

Loans - principally dealing with any monetary advance including housing finance applications and arrangements, personal lending and overdraft facilities. Job titles

include Advances Clerk and Security Clerk.

International - involving a wide range of international money arrangements such as overseas currency exchange, travellers cheques, import and export transactions, payment transfers, letters of credit and forward exchange contracts. Job titles cover Bills Clerk, Bills Clerk-Specialised and Travel Officer.

Additionally 50 grade 3 and 4 job holders from selected divisions at BNZ Head Office, Wellington were invited to participate in this study. These employees were asked to indicate their grade, primary work content (typing, administration or other) and employment division. Divisions were broken down into Financial, Group Accounting, VISA, Group Information Systems and Other.

(ii)Response Rate

One hundred and forty-one questionnaires were returned, resulting in a respose rate of 56%. Of the returned questionnaires 135 were considered usable. The main reason for exclusion was a reported grade level other than three or four. One hundred and five questionnaires came from job holders employed in the branch network, 30 from the divisions at Head Office.

(iii)Demographics

The major demographic characteristics of the sample are presented in Table 3. The sample is predominantly 20 - 24 years of age, female, single, in full time employment and grade four. Most people have been with the bank for at least two years, with 31% reporting tenures of 5 years or

TABLE 3

Demographic Characteristics of the Sample.

	n	%		n	%
AGE			GRADE		
Under 20 yrs	19	14.1	3	35	25.9
20 - 24 yrs	75	55.6	4	99	73.3
25 - 29 yrs	25	18.5			
30 - 34 yrs	5	3.7	DIVISION		
35 - 39 yrs	2	1.5	Branch	105	77.8
40 - 45 yrs	6	4.4	Financial	4	3.0
			Group Accounting	4	3.0
GENDER			VISA	11	8.1
Female	89	65.9	Group Info Systems	6	4.4
Male	43	31.9	Other	4	3.0
MARITAL STATUS			JOB SECTOR		
Single	80	59.3	Administration	23	17.0
Married or Defacto	48	35.6	Typing	13	9.6
Separated or Divorced	4	3.0	Customer Services	11	8.1
			Loans	31	23.0
EMPLOYMENT			International	28	20.7
Part Time	3	2.2	Other eg specialists	28	20.7
Full Time	129	95.6			
			POSITION TIME		
TENURE			0 - 6 mths	62	45.9
Less than 1 year	14	10.4	6 - 12 mths	29	21.5
1 - 2 yrs	19	14.1	1 - 2 yrs	29	21.5
2 - 3 yrs	30	22.2	2 - 3 yrs	7	5.2
3 - 4 yrs	17	12.6	3 - 4 yrs	1	0.7
4 - 5 yrs	12	8.9	4 - 5 yrs	1	0.7
5 years or more	42	31.1	5 years or more	4	3.0

NOTE. Percentages do not necessarily sum to 100 due to missing cases.

more. Time elapsed in the present position covers the full range, with 67% of the sample reporting less than 12 months.

C. THE RESEARCH INSTRUMENTS

The data were gathered on a voluntary basis through a survey questionnaire. A letter of introduction and invitation to participate in the survey with a prepaid addressed envelope and returning instructions accompanied each questionnaire. The questionnaire was designed to assess the job holder's perceptions of several work related features (Job Pressures), provide scores of masculinity and femininity (Personal Description), give a general indication of health status (General Health), and provide Background Information. See Appendix I.

(i) Job Pressures

There are a multitude of work stress items in the literature on work stress that could be presented in a survey questionnaire that seeks to isolate and examine sources of stress for a sample of employed people. It is obvious that some restrictions have to be made on the number of dimensions represented and the total number of items. Accordingly the author has chosen fourteen work stress dimensions that are prevalent in the literature and research. Each dimension will be made up of three items making a total of 42 items. The selected stress dimensions parallel those reported by Corlett and Richardson (1981), Gmelch (1983), Ivancevich and Matteson (1980), and Marshall and Cooper (1979). They are:

JOBAMB: Job Ambiguity,

ROLECON: Role Conflict,

QUANT: Quantitative Overload,

QUAL: Qualitative Overload,

UNDER: Underload,

TIME: Time Management,

CARDEV: Career Development,

ORGST: Organisational Structure,

ENVIR: Environmental Conditions,

COMM: Communication,

FISO: Feeling Isolated,

INDIV: Individual Identity,

DISCR: Discrimination,

SEXHA: Sexual Harassment,

(See Appendix II for specific items).

The job pressures section requires respondents to indicate on a four point scale the level of pressure they experience for each of the 42 work features and situations presented (1 = I feel no pressure, 2 = I feel slight pressure, 3 = I feel moderate pressure, 4 = I feel extreme pressure). Additionally, respondents are asked to indicate what effect the level of pressure has on them (1 = negative effect; 2 = neutral, no effect; 3 = positive effect). Respondents were also given the opportunity to include additional stressors and provide ratings on these.

(ii)Personal Description

To enable the calculation of masculinity (M) and femininity (F) scores, Form A of the PDQ (Antill et al., 1981) is included here. The PDQ views M and F as

independent constructs representing the cultural stereotypes of the typical male and the typical female. Fifty personality characteristics are involved in the self description task which requires subjects to rate on a seven point scale the applicability of each characteristic to themselves (1 = never or almost never true, 7 = always or almost always true). Six subscales feminine positive (F+), feminine negative (F-), masculine positive (M+), masculinine negative (M-), social desirability positive (S+) and social desirability negative (S-) are formed from simple summation of scale item responses (See Appendix III).

The feminine (masculine) subscales each contain 10 items judged to be more characteristic of the typical female (male) than the typical male (female). Combining F+ and F- gives a total femininity score (Ftot). Similarly combining M+ and M- gives the total masculinity score (Mtot). The S+ and S- subscales contain only five items each. The composite scale of social desirability (Stot), is made up of S+ and S- reversed. These items have been selected on the basis of non-differentiation of the two sexes and the scale is designed to ensure the sex role inventory is not simply tapping a general tendency to endorse socially desirable traits.

(iii)General Health

For a measure of general health status and to enable comparisions with other work stress studies (see Table 1) the 12-item version of Goldberg's (1972) General Health Questionnaire (GHQ-12) is included. The GHQ-12 asks people if they have recently lost much sleep over worry, felt constantly under strain, been able to enjoy their normal

day-to-day activities and so forth. A Likert method of scoring is employed with an item range from 0 to 3 and a high score (maximum = 36) is indicative of low health status or ill health.

(iv)Background Information

General information on respondents' age group, gender, marital status, type of employment, tenure with the organisation, grade, locality or division, job sector, and time in present position is collected from the nine items in the Background Information section. Most items require the selection of an appropriate coded response.

D. STATISTICAL ANALYSES

Statistical analyses in this study are conducted with the SPSS and SPSSX CROSSTAB, BREAKDOWN, PEARSON CORR, RELIABILITY, ANOVA and MANOVA programs (Statistical Packages for the Social Sciences: Nie, Hull, Jenkins, Steinbrenner & Brent, 1975; SPSSX, statistical algorithms, 1983).

ANOVA or regression approaches that test the main effects of femininity, masculinity and gender and each of the possible interactions have been recommended for testing the sex role models (Lubinski et al., 1983; Marsh, 1987). The main effects of femininity and masculinity test the masculinity model and the additive androgyny model. The femininity-by-masculinity interaction test the interactive androgyny model. The interactions between the effects described above and gender test the congruence model. A general test of the differential androgyny model is based on a repeated measures ANOVA with main effects of masculinity

and femininity, and significant masculinity-by-scale and femininity-by-scale interactions.

E. PROCEDURES

(i) The Pilot Study

A pilot study was conducted during the period August 13 - 20, 1987. Eight grade 3 and 4 job holders, six females and two males, from the Wellington District Office and Head Office participated in the study. Aged between 20 and 34 years, all were employed on a full time basis and tenures with the organisation covered the full range from 'less than 1 year' to '5 years or more'. In general, feedback from subjects was favourable. No major difficulties were reported for the survey tasks. Only minor changes to the questionnaire were considered necessary. The wording of the effect scale in the Job Pressures section was changed to include the words 'on me' e.g., POSITIVE EFFECT on me, in order to clarify the perspective and a horizontal line was added to the General Health section to emphasise the division between the two subsections.

(ii) The Main Study

During the second week in September, 250 questionnaires for the main study were distributed to grade 3 and 4 employees at branches within the Wellington District and selected Head Office divisions. A prompt was circulated in the later stages of the survey period (Appendix IV). As promised a summary of the survey results was prepared as soon as possible following data analysis (Appendix V). In due course with liaison with the Personnel Department this

was made available to interested participants.

CHAPTER FOUR: RESULTS

A. GENERALITY OF JOB PRESSURES

The sample consists of males and females from the branch network and selected Head Office divisions (Financial, Group Accounting, VISA, Group Information Systems and Other) of the BNZ. Job sectors involved are Administration (17.0%), Typing (9.6%), Customer Services (8.1%), Loans (23.0%), International (20.7%), and Other (20.7%). Table 4 presents the six job sectors in terms of grade level and gender composition. Customer Services is the largest job sector and is predominantly grade 4 and female. The number of males exceeds the number of females in only one of the job sectors, Loans. Here the ratio is 3:1. Typing is dominated by grade 3 personnel while all other job sectors are predominantly grade 4.

Correlations among the background variables are reported in Table 5. Eight of the 36 possible correlations obtain statistical significance ($p < .01$). Job Sector correlates negatively with Division ($r = -.76$) indicating that a move away from the Branch into Head Office Divisions is associated with a decrease in the likelyhood of employment in the job sectors associated with Administration, Typing, Customer Services, Loans and International, i.e., a move towards a specialist area. Division also correlates with Grade Level ($r = .25$), this expresses an association of higher grading with job positions in Head Office divisions. Age correlates significantly with Marital Status ($r = .51$), Tenure ($r = .35$), and Position Time ($r = .25$). Tenure also correlates with Marital Status ($r = .28$), Grade Level

TABLE 4

Job Sectors by Grade Level and Gender.

	Job Sector					
	Adminis-tration	Typing	Customer Services	Loans	Inter-national	Other
Grade 3						
female	1	6	8	1	7	1
male	1	1	3	3	3	0
Grade 4						
female	6	4	16	14	10	14
male	5	0	2	9	8	8
Total	13	11	31	28	28	23

NOTE. Totals take into account subjects not reporting grade level or gender.

TABLE 5

Intercorrelations of Background Variables.

	1	2	3	4	5	6	7	8	9
1 Age	—								
2 Gender	-.10	—							
3 Marital Status	.51**	-.21	—						
4 Employment	-.04	-.00	-.07	—					
5 Tenure	.35**	.10	.28*	-.07	—				
6 Grade Level	.21	.02	.19	.02	.35**	—			
7 Division	.05	.01	-.02	.08	-.16	.25*	—		
8 Job Sector	-.03	.04	-.01	-.07	.21	-.15	-.76**	—	
9 Position Time	.25**	.11	-.03	-.11	.32**	.21	-.06	-.01	—

* $p < .01$
** $p < .001$

(r = .35), and Position Time (r = .32). Most of these correlations are small and in expected directions associated with age of subject. Note, Gender displays no statistically significant association with any of the other background variables.

The pressure response rates for the 42 work features and situations presented in the Job Pressures section of the questionnaire are reported in Table 6. Endorsement rates for the whole sample range from 14.1% to 73.2%. It was arbitrarily decided by the author that items endorsed by over 60% of the sample would be regarded as stressors. On this basis 13 stressors are identified for the sample (items 2, 3, 7, 19, 20, 21, 22, 24, 26, 29, 31, 33, and 40).

Chi-square tests were utilised to test for significant differences between the six job sectors. Only three items emerge with differences on the basis of job sector (items 1, 3, and 7). Item 1, 'My job duties are unclear to me', was classified as a stressor for Loans (77.8%) and Administration (76.9%) only. Item 3, 'I have more work to do than can be done in a normal day', was isolated as a stressor for four job sectors: Loans (92.9%), Other e.g., specialist (77.3%), International (67.9%) and Administration (61.5%). Item 7, 'I feel that I am at a standstill in my career' was reported by Typing (100%), Customer Services (67.7%) and Loans (60.7%) as a source of work stress.

Three work features obtain very low levels of endorsement (less than 30%) as a pressure (items 14, 28,and 42). These are the three items that make up the Sexual Harassment work stress dimension. This indicates that people in the sample do not perceive sexual harassment as a stressor in their working environments.

TABLE 6

Percentage Response Rates of Pressure for the Work Features.

Work Features	JOB SECTOR						
	Administration (n=13)	Typing (n=11)	Customer Services (n=30)	Loans (n=28)	International (n=28)	Other (n=23)	Total (n=133)
1[a]	76.9	27.3	50.0	77.8	42.9	59.1	56.5*
2	84.6	63.6	73.3	70.4	75.0	69.6	72.7
3	61.5	54.5	53.3	92.9	67.9	77.3	69.7*
4	53.8	54.5	51.7	55.6	64.3	47.8	55.0
5	53.8	72.7	61.3	50.0	67.9	54.5	59.4
6	38.5	45.5	53.3	57.1	42.9	65.2	51.9
7	46.2	100.0	67.7	60.7	59.3	45.5	61.4*
8	46.2	36.4	46.7	57.1	70.4	65.2	56.1
9	30.8	45.5	40.0	39.3	35.7	45.5	39.4
10	92.3	54.5	56.7	50.0	50.0	60.9	57.9
11	23.1	45.5	35.5	28.6	25.0	28.6	30.3
12	46.2	18.2	43.3	53.6	28.6	40.9	40.2
13	69.2	27.3	58.6	55.6	59.3	56.5	56.2
14	23.1	10.0	24.1	14.8	10.7	22.7	17.8
15	53.8	50.0	40.0	46.4	21.4	38.1	39.2
16	61.5	40.0	43.3	51.9	42.9	36.4	45.4
17	53.8	45.5	57.1	65.4	55.6	60.9	57.8
18	38.5	30.0	40.7	38.5	37.0	39.1	38.1
19	30.8	63.6	69.0	73.1	61.5	65.2	63.3
20	69.2	72.7	64.3	84.6	70.4	77.3	73.2
21	53.8	90.9	60.7	50.0	66.7	54.5	60.6

NOTE. Pressure Responses are based on "slight", "moderate: or "extreme" ratings Chi-square utilised to test for significant differences between job sectors * $p > .05$.

a Work Feature items 1 to 42 are in Appendix I. The job stressors for the whole sample (60%+ endorsement) are underlined.

TABLE 6 (continued)

Percentage Response Rates of Pressure for the Work Features.

Work Features	JOB SECTOR						
	Administration (n=13)	Typing (n=11)	Customer Services (n=30)	Loans (n=28)	International (n=28)	Other (n=23)	Total (n=133)
22[a]	61.5	45.5	63.0	73.1	70.4	86.4	69.0
23	38.5	30.0	55.6	30.8	51.9	52.2	45.2
24	69.2	63.6	60.7	57.7	74.1	72.7	66.1
25	30.8	30.0	64.3	55.6	51.9	45.5	50.4
26	46.2	72.7	63.0	61.5	59.3	69.6	62.2
27	23.1	45.5	33.3	46.2	40.7	22.7	35.7
28	15.4	10.0	29.6	16.0	11.1	31.8	20.2
29	61.5	54.5	62.1	69.2	55.6	59.1	60.9
30	53.8	40.0	46.4	38.5	22.2	36.4	38.1
31	76.9	63.6	75.0	74.1	70.4	73.9	72.9
32	38.5	40.0	39.3	63.0	44.4	56.5	48.4
33	53.8	81.8	62.1	55.6	66.7	69.6	63.8
34	53.8	36.4	40.7	53.8	55.6	54.5	50.0
35	30.8	63.6	63.3	57.1	60.7	63.6	58.3
36	61.5	36.4	60.0	67.9	57.1	45.5	56.8
37	38.5	20.0	41.4	37.0	25.0	31.8	33.3
38	30.8	60.0	41.9	17.9	21.4	36.4	31.8
39	46.2	60.0	56.7	32.1	46.4	45.5	46.6
40	61.5	81.8	74.2	78.6	67.9	72.7	72.9
41	38.5	90.0	43.3	60.7	39.3	54.5	51.1
42	7.7	20.0	20.7	11.5	7.1	18.2	14.1

NOTE: Pressure Responses are based on "slight", "moderate" or "extreme" ratings Chi-square utilised to test for significant differences between job sectors * $p > .05$

a Work Feature items 1 to 42 are in Appendix I. The job stressors for the whole sample (60%+ endorsement) are underlined.

The isolated stressors represent nine of the 14 work stress dimensions: Job Ambiguity (items 1, 29), Qualitative Overload (items 3, 31), Underload (items 19, 33), Career Development (items 7, 21), Individual Identity (items 26, 40), Role conflict (item 2), Time Management (item 20), Organisational Structure (item 22), and Communication (item 24). There are five work stress dimensions not represented: Qualitative Overload, Environmental Conditions, Feeling Isolated, Discrimination and Sexual Harassment. Items on these dimensions are not reported to be perceived as pressures in the working environment of the sample.

The distribution of Effect ratings (positive, neutral, negative) for the 14 isolated stressors are presented in Table 7. Modal Effect ratings are negative for 12 of the stressors. The two remaining stressors are reported to have a positive modal effect. Complete stressor items and modal effects for the whole sample are reported in Table 8. Table 9 gives the items and modal effects for the stressors dependent on job sector.

Scales are formed for the 14 work stress dimensions. Scale scores represent the simple summation of pressure responses to the items pertaining to the scale. A total stress scale (TSTRESS) is developed from the summation of all the job pressure items. For calculating scale means pressure ratings have been recoded to range from 0 to 3. As work stress dimension consist of three items their scales have a maximum possible score of nine. TSTRESS has a maximum possible score of 126. Scale means and standard deviations are reported in Table 10. Means for stress dimension scales range from 3.90 to 6.50. Three stress

TABLE 7

Percentage Response Rates of Effect for the Job Stressors.

Job Stressor	Effect		
	Positive	Neutral	Negative
1	18.9	33.8	47.3
2	8.2	37.1	54.6
3	32.6	23.9	43.5
7	12.3	17.3	70.4
19	16.9	18.6	64.4
20	62.0	21.1	16.9
21	11.5	29.5	59.0
22	4.3	31.9	63.8
24	5.9	20.6	72.1
26	7.9	34.9	57.1
29	11.5	31.1	57.4
31	38.6	28.6	32.9
33	6.5	14.5	79.0
40	7.9	10.5	81.6

NOTE. Effect ratings are based on subjects endorsing the work feature as a pressure.

TABLE 8

Job Stressors and Associated Effect for the Sample.[a]

	Job Stressor	Modal Effect
2	At work I receive conflicting demands from two or more people	Negative
19	My job is seldom challenging	Negative
20	I have regular important deadlines that I have to meet in my work	Positive
21	I have few opportunities to grow or learn new skills in this organisation	Negative
22	The formal organisational structure has too much red tape	Negative
24	There is little opportunity to receive feedback on how I am doing in my job	Negative
26	I feel like a small cog in a big machine	Negative
29	I am not sure of how much authority I have	Negative
31	There seems to be a sense of urgency about all work tasks	Positive
33	I frequently find my work boring and repetitive	Negative
40	I sometimes feel trapped by the system here	Negative

a No significant differences between Job Sectors, $\underline{X}^2$ $\underline{p} < .05$

TABLE 9

Job Stressors and Associated Effect Dependent on Job Sector.[a]

	Job Stressor (Specific Job Sectors)	Modal Effect
1	My job duties are unclear to me (Administration, Loans)	Negative
3	I have more work to do than can be done in a normal day (Administration, Loans, International, Other)	Negative
7	I feel that I am at a standstill in my career (Typing, Customer Services, Loans)	Negative

a Significant difference between Job Sectors, $\underline{X}^2$ $p < .05$

TABLE 10

Means and Standard Deviations for Work Stress Dimension Scales and Total Stress.

Scale	Mean	sd	n
JOBAMB	5.32	1.95	126
ROLECON	5.42	1.96	127
QUANT	6.50	2.36	128
QUAL	5.18	2.05	126
UNDER	6.34	2.46	128
TIMING	5.78	1.96	127
CARDEV	6.17	2.75	127
ORGST	5.98	2.19	126
ENVIR	4.80	1.86	126
COMM	5.30	1.78	127
PISO	4.90	1.79	127
INDIV	5.81	2.08	126
DISCR	5.52	2.39	125
SEXHA	3.90	1.84	125
TSTRESS	34.43	19.28	118

NOTE. Each work stress dimension scale comprises three work feature items, see Appendix II. Work stress dimension scale scores represent the summation of pressure ratings for the three items, maximum score = 9. Total stress is the sum of pressure ratings for all 42 work feature items, maximum score = 126. (Pressure ratings have been recoded to range from 0 to 3.)

dimension scales have high means Quantitative Overload (6.50), Underload (6.34), and Career development (6.17). TSTRESS has a mean of 34.43.

Table 11 shows the alpha reliability estimates and intercorrelations for the 15 stress scales. Reliabilities estimates are reasonable and range from .50 to .93. Job Ambiguity, Quantitative Overload, Career Development, Discrimination, Sexual Harassment and TSTRESS have alpha estimates above .65. TSTRESS has a very high reliability estimate of .93.

The stress dimension scales intercorrelate moderately, with 12 intercorrelations exceeding .49 and only 14 correlations fail to reach statistical significance ($p < .01$). Five of the stress dimension scales display statistically significant but small relationships with the background variables (See Table 12). ROLECON, COMM, and FISO all correlate negatively with Employment ($r = -.18$ $p < .05$, $r = -.24$ $p < .01$, $r = -.21$ $p < .05$). This seems to suggest that job holders employed on a full time basis report less pressure from these dimensions than job holders employed on a part time basis. An increase in Grade Level is associated with an increase in pressure on the JOBAMB dimension ($r = .19$, $p < .05$). Position Time correlates positively with CARDEV ($r = .31$, $p < .001$), suggesting that the longer a person is in the same job position the more pressure a person experiences with regard to CARDEV. TSTRESS displays no significant ($p < .05$) correlations with the background variables. Extra job pressures, reported in response to the open ended question at the end of the Job Pressures section, are presented in Appendix V.

TABLE 11

Intercorrelations and Alpha Reliability Estimates for the Stress Dimension Scales and Total Stress.

	SCALE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	JOBAMB	(.63)														
2	ROLECON	.63**	(.58)													
3	QUANT	.41**	.32**	(.71)												
4	QUAL	.50**	.44**	.66**	(.60)											
5	UNDER	.21**	.29*	−.02	.11	(.65)										
6	TIMING	.39**	.32**	.67**	.59**	.03	(.52)									
7	CARDEV	.32**	.46**	.08	.20	.56**	.14	(.82)								
8	ORGST	.47**	.42**	.29*	.35**	.43**	.34**	.53**	(.61)							
9	ENVIR	.43**	.33**	.32**	.30*	.23*	.29*	.37**	.37**	(.57)						
10	COMM	.46**	.45**	.25*	.28*	.21	.33**	.38**	.44**	.37**	(.55)					
11	FISO	.44**	.53**	.26	.37**	.24*	.25*	.49**	.39**	.46**	.49**	(.50)				
12	INDIV	.44**	.48**	.17	.18	.45**	.33**	.55**	.65**	.49**	.40**	.48**	(.60)			
13	DISCR	.48**	.44**	.20	.25*	.40**	.20	.73**	.59**	.44**	.32**	.44**	.61**	(.67)		
14	SEXHA	.46**	.43**	.14	.33**	.36**	.11	.43**	.40**	.44**	.39**	.48**	.39**	.55**	(.78)	
15	TSTRESS	.72**	.73**	.52**	.59**	.53**	.55**	.71**	.75**	.63**	.62**	.69**	.74**	.76**	.64**	(.93)

NOTE. Alpha reliability estimates appear in parentheses.

* $p < .01$
** $p < .001$

TABLE 12

Correlations of Work Stress Dimension Scales and Total Stress with the Background Variables.

	Background Variables								
Scale	Age	Gender	Marital Status	Employment	Tenure	Grade Level	Division	Job Sector	Position Time
JOBAMB	-.15	.09	-.11	-.08	.03	.19*	.07	-.02	-.17
ROLECON	-.02	.06	.01	-.18*	.04	.12	.08	-.07	.01
QUANT	.03	.03	.05	.05	.15	.17	.08	.02	-.14
QUAL	-.02	.14	.05	-.01	.03	.11	.04	.01	-.11
UNDER	-.06	.01	-.07	.02	.12	-.11	-.04	.00	-.02
TIMING	.05	.14	.12	-.02	-.15	.10	.12	.02	-.10
CARDEV	.06	-.08	-.08	-.11	.06	-.01	-.04	-.00	.31***
ORGS	.08	.09	-.07	-.00	.06	.10	.14	.04	-.03
ENVIR	-.05	-.14	-.01	.04	.04	.06	.08	-.07	-.09
COMM	.10	.01	.10	-.24**	-.16	.15	.13	-.09	-.03
FISO	-.02	-.08	-.00	-.21*	.01	.12	-.01	.03	.06
INDIV	-.07	.05	-.14	-.07	.07	.04	.58	.01	.08
DISCR	-.03	-.03	-.18	-.10	.04	.12	.07	-.02	.17
SEXHA	-.04	-.15	-.06	-.04	.04	.16	.14	-.14	-.03
TSTRESS	.01	.01	-.03	-.10	.03	.15	.11	-.03	.01

* $p < .05$
** $p < .01$
*** $p < .001$

B. GENERAL HEALTH

Goldberg's (1972) General Health Questionnaire (GHQ-12) provides a measure of general health status. The inventory contains 12 items with Likert type responses ranging from 0 to 3. Calculation of the general health index involves the summation of item responses making a maximum possible score of 36. High scores are indicative of ill health status.

Health scores for the sample range from 3 to 32 with a mean of 12.01 (sd = 6.07, n = 134). The distribution of scores is presented in Table 13. Scale reliability is respectable (α = .86). The mean for this sample is slightly higher than means reported for other studies of employed males and females. Groups of employed people have reported GHQ-12 means ranging from 7.86 to 9.71. Unemployed groups report means of between 10.75 and 17.78 (Banks et al., 1980; Banks & Jackson 1982; Jackson et al., 1983; Kirkpatrick & Trew, 1986).

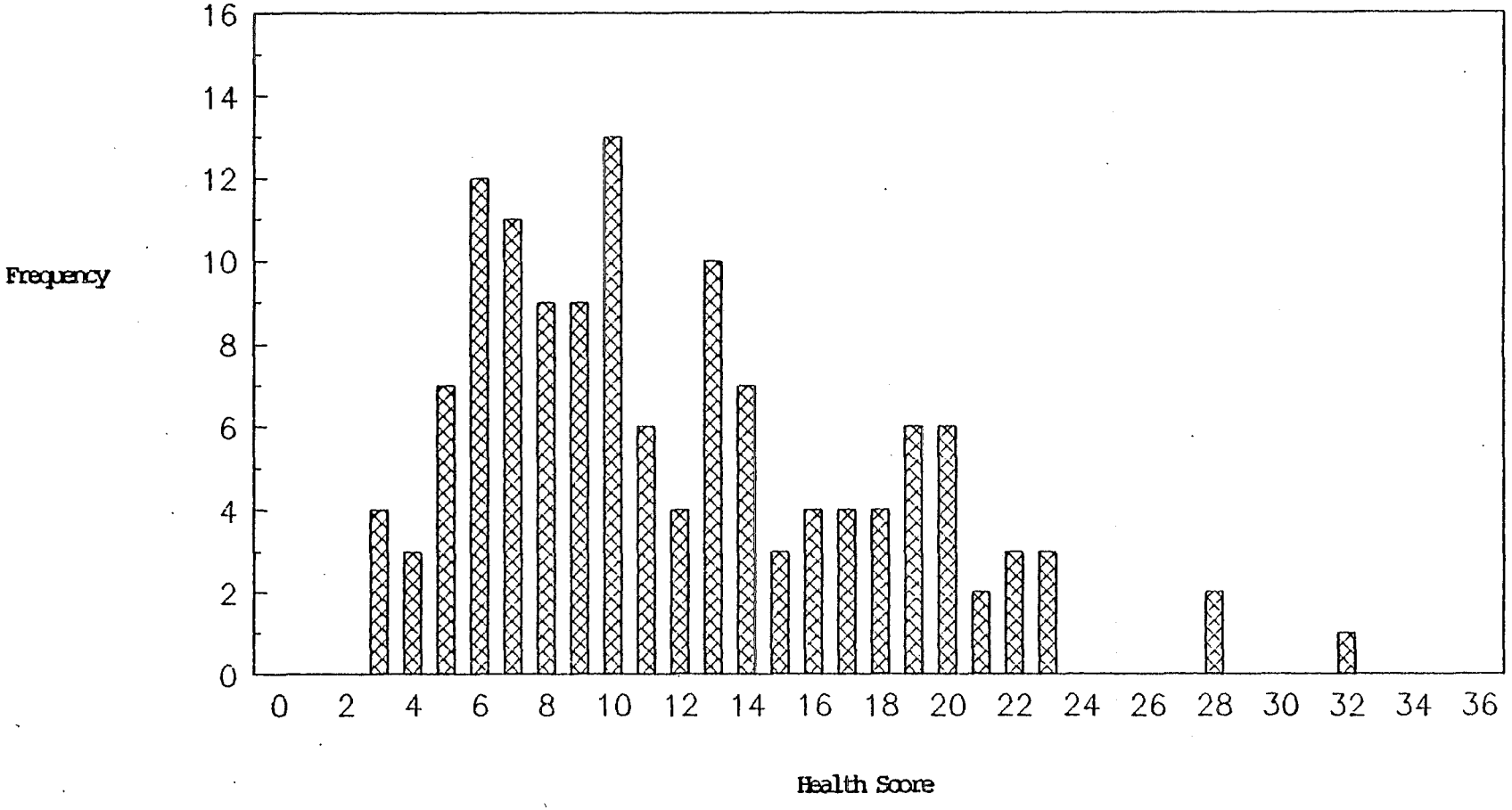
Correlations between the background variables and health scores are reported in Table 14. All correlations fail to achieve statistical significance ($p < .05$). High GHQ-12 scores, indicative of ill health, were found to have a small positive association with the amount of pressure reported ($r = .22$, $p < .05$).

C. THE SEX ROLE SCALES

Sex role scales feminine positive (F+), feminine negative (F-), masculine positive (M+), masculine negative (M-), social desirability positive (S+) and social desirability negative (S-) are contained within the

TABLE 13

Frequency Distribution of Health Scores (GHQ-12, Goldberg, 1972).



NOTE. The GHQ-12 is made up of 12 items. Responses are assigned values of 0,1,2 or 3 giving a range of scores from 0 to 36.

TABLE 14

Correlations Between Background Variables and Health.[a]

BACKGROUND VARIABLES	HEALTH
Age	.02
Gender	-.03
Marital Status	-.00
Employment	-.11
Tenure	-.03
Grade Level	.14
Division	-.00
Job Sector	.04
Position Time	.05

* $p < .05$

a The General Health Questionnaire (12 items) developed by Goldberg (1972) is utilised as the measure of Health.

personality characteristcs of the PDQ (Antill et al., 1981). F+, F-, M+, and M- are made up of 10 items. The social desirability scales, S+, and S-, each contain 5 items. A total feminine scale (Ftot) is formed from the addition of F+ and F-. Similarly a total masculine scale (Mtot) is formed from both M+ and M-, and a total desirability score is formed from S+ and S- (reversed). Scale scores are the summation of item responses. Responses range from 1 to 7 therefore F+, F-, M+ and M- have scores ranging from 10 to 70, S+ and S- scores range from 5 to 35, and Ftot and Mtot scores range from 20 to 140 while Stot has scores between 10 and 70.

The relevant statistics for the sex role scales are presented in Table 15 and Table 16. Means for F+, F-, M+, and M- range from 28.56 to 50.86. Analysis of variance was used to test for significant differences between female and male subjects (Table 15). It is noted that three of the scales show significant gender differences. Females score significantly higher on F+ than do males ($p < .05$), while males score significantly higher than females on M- ($p < .01$) and Mtot ($p < .05$). Alpha reliabilities for the scales are generally satisfactory ranging from .54 to .79 (Table 16). The S- scale is the weakest in this respect ($\alpha = .54$).

Intercorrelations among the various sex role scales (Table 16) vary considerably but those between positive and negative subscales and their respective total scales are generally the highest. The Stot scale correlates significantly in expected directions with the feminine subscales (F+ $r = .24$, F- $r = -.39$, $p < .01$) and the masculine subscales (M+ $r = .23$, M- $r = -.40$, $p < .01$) however these correlations are not large.

TABLE 15

Means and Standard Deviations of the Sex Role Scales for Females, Males and Total Sample.

Sex Role Scale[a]	Gender					
	Female (n=89)		Male (n=43)		Total	
	Mean	sd	Mean	sd	Mean	sd
F+	51.88	6.24	48.67	7.76*	50.86	6.89
F-	34.16	8.20	33.68	8.53	34.00	8.28
M+	41.70	7.24	42.90	6.63	42.09	7.05
M-	26.91	7.88	31.78	7.58**	28.56	7.78
Ftot	86.81	11.53	82.05	12.53	84.82	12.01
Mtot	68.65	13.75	74.26	11.40*	70.50	13.02
S+	24.95	3.25	24.74	3.70	24.88	3.40
S-	13.37	3.96	14.10	4.22	13.59	4.04
Stot	51.78	5.67	50.55	5.63	51.39	5.66

NOTE.

a Sex role scales are from the Personal Description Questionnaire, Form A (Antill et al., 1981).

Ftot = (F+) + (F-)
Mtot = (M+) + (M-)
Stot = (S+) - (S-) + 40

F+, F-, M+, M- range 10-70
Ftot, Mtot range 20-140
S+, S- range 5-35
Stot range 10-70

* $p < .05$
** $p < .01$ significant differences between genders.

TABLE 16

Intercorrelations of Sex Role Scales and Their Correlations with Background Variables and Health.

	Sex Role Scale[a]								
	F+	F−	M+	M−	Ftot	Mtot	S+	S−	Stot
Sex Role Scales									
F+	(.73)								
F−	.23	(.77)							
M+	.16	−.24*	(.73)						
M−	−.28*	.03	.50**	(.79)					
Ftot	.74**	.83**	−.09	−.15	(.77)				
Mtot	−.07	−.13	.85**	.88**	−.13	(.83)			
S+	.37**	−.16	.57**	.02	.11	.34**	(.66)		
S−	−.02	.45**	.16	.60**	.31**	.45**	−.23*	(.54)	
Stot	.24*	−.39**	.23*	−.40**	−.13	−.10	.75**	−.82**	(.63)
Background Variables									
AGE	.22	.16	.05	−.10	.23	−.04	.13	−.01	.06
GENDER	−.22	−.03	.08	.29*	−.16	.20	−.03	.09	−.10
MARITAL STATUS	.18	.02	.04	−.04	.11	.00	.09	−.01	.03
EMPLOYMENT	−.01	.03	−.05	−.03	.01	−.05	.01	−.07	.06
TENURE	.14	.09	.09	−.06	.14	.01	.19	−.06	.11
GRADE	.02	.17	.04	.07	.13	.04	.14	−.06	.07
DIVISION	−.26*	.16	−.07	.21	−.04	.08	−.25*	.27*	−.31**
JOB SECTOR	.18	−.04	.17	−.05	.08	.06	.18	−.07	.13
POSITION TIME	.11	.08	−.01	−.18	.13	−.12	.10	.19	.17
HEALTH	−.03	.31**	−.14	.02	.22	−.09	−.04	.23*	−.18

NOTE. Coefficient alpha estimates of reliability for the sex role scales appear in parentheses.

a sex role scales are from the Personal Description Questionnaire, Form A (Antill et al., 1981).

* $p < .01$

** $p < .001$

Sex role scale relations with the background variables are limited to five statistically significant correlations ($p < .01$). Gender correlates significantly with M- ($r = .29$, $p < .01$) as discussed above. Division correlates negatively with F+ ($r = -.26$, $p < .01$) displaying a general trend that employment at Head Office is associated with a lower femininity positive scale score than employment at a Branch. Division also correlates with the three social desirability scales (S+ $r = -.25$, S- $r = .27$, Stot $r = -.31$, all $p < .01$). Health correlates positively to two of the sex role scales, F- ($r = .31$ $p < .001$) and S- ($r = .23$ $p < .01$).

For further analyses F+, F-, M+, M-, Ftot and Mtot scores are divided into quartiles. Quartiles are based on the distribution of scores. For each scale the 25, 50, 75 and 100 percentiles become cutoff points and thus four levels of each scale emerge. Hence based on scale scores subjects fall into one of four levels/groups for each sex role scale (F+, F-, M+, M-, Ftot, Mtot). Males and females are represented at each level of the four levels, refer to Table 17 for the distribution. Two gender differences are observed, M- ($X^2 = 11.74$, $df = 3$, $p < .01$) and Ftot ($X^2 = 8.06$, $df = 3$, $p < .05$) when quartiles are examined, however the earlier significance of gender for Mtot and F+ scales do not now appear.

D. TESTING THE MODELS

A series of ANOVA analyses are used to test the five sex role models (Lubinski et al., 1983; Marsh, 1987). The main effects of femininity and masculinity test the masculinity

TABLE 17

Sex Distribution of Sex Role Scale Scores.

Sex Role Scales	Sex Role Scale Quartiles			
	1	2	3	4
F+				
female	14	25	21	24
male	15	8	7	9
F-				
female	18	23	21	19
male	12	9	10	10
M+				
female	22	19	26	17
male	9	10	9	12
M-				
female	24	24	18	14
male	6	6	12	17**
Ftot				
female	14	23	21	22
male	16	7	9	7*
Mtot				
female	25	16	21	17
male	5	12	8	14

NOTE. Significant differences on the basis of gender.

* $p < .05$
** $p < .01$

model and the additive androgyny model. The femininity-by-masculinity interaction test the interactive androgyny model. The interactions between the effects described above and gender test the congruence model. A general test for the differential androgyny model is based on a repeated measures ANOVA (MANOVA program) with main effects of masculinity and femininity and significant masculinity-by-scale and femininity-by-scale interactions observed. Separate analyses are conducted for positive scales (F+, M+), negative scales (F- M-) and the totals (Ftot, Mtot). Results from ANOVA analyses are presented in Table 18.

The masculinity model proposes a significant main effect for masculinity while the effect of femininity should fail to reach significance or contribute very little. Some support for the masculinity model is evident, but only for groups based on negatively valued scales, in that a masculinity effect (M- $p < .005$) is present, however femininity also reaches significance (F- $p < .05$).

The additive androgyny model relies on the significance of both masculinity and femininity effects. The additive androgyny model is supported for groups based on negatively valued scales in that both femininity and masculinity contribute substantially (F- $p < .05$, M- $p < .005$). The lack of masculinity and femininity effects for groups on the basis of positively valued scores and total scales offers no support for the additive androgyny model.

The interactive androgyny model hypothesises an femininity-by-masculinity interaction that contributes beyond the individual contribution of femininity and masculinity. However the femininity-by-masculinity

TABLE 18

ANOVA Effects of Femininity, Masculinity and Gender on Multiple Facets of Work Stress for Positive, Negative and Total Scales.

	Positive		Negative		Total	
Effect	F	p	F	p	F	p
Between						
Femininity (F)	0.93	.430	4.02	.010*	1.24	.299
Masculinity (M)	1.39	.253	5.08	.003**	1.99	.122
Gender (G)	2.40	.125	3.42	.068	2.10	.151
F x M	0.86	.561	0.77	.640	0.62	.778
F x G	1.29	.282	0.94	.427	1.93	.131
M x G	1.54	.211	2.07	.110	2.16	.098
F x M x G	1.36	.255	0.59	.763	1.54	.164
Within						
Scale (S)	4.29	.000***	2.75	.001**	4.89	.000***
F x S	0.86	.716	0.66	.949	0.91	.628
M x S	0.78	.828	0.79	.817	0.93	.596
G x S	0.73	.732	0.75	.709	1.07	.383
F x M x S	0.85	.872	0.80	.941	0.72	.989
F x G x S	0.92	.617	0.77	.845	0.63	.965
M x G x S	0.61	.974	0.98	.511	1.10	.311
F x M x G x S	0.92	.707	0.79	.920	0.85	.840

NOTE. Subjects were divided into four groups on the basis of F and M scores and a 4(F) x 4(M) x 2(G) x 14(Work Stress Dimension Scales, a repeated measures variable) was performed on pressure responses with the MANOVA procedure from SPSSX (SPSSX, Statistical algorithms, 1983).

Separate analyses were performed on F and M derived from postively valued items, negatively valued items and their total.

* $p < .05$
** $p < .005$
*** $p < .001$

interaction fails to reach statistical significance for groups based on positively valued scales negatively valued scales or their total. Furthermore this lack of interaction is also consistent across all the 14 areas of work stress as confirmed by the non significant femininity-by-masculinity-by-Scale interaction.

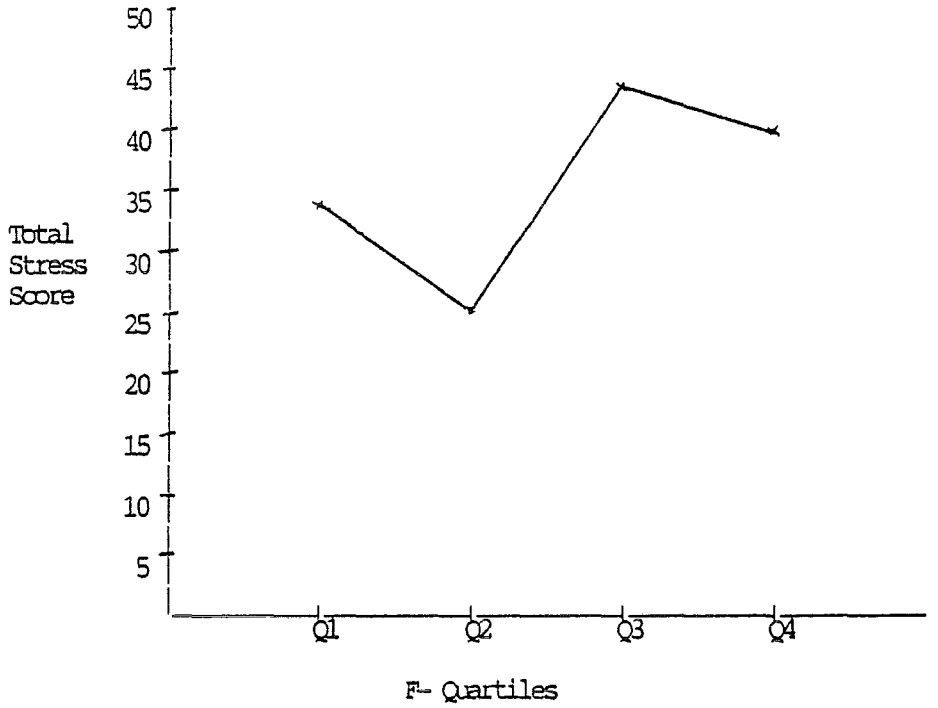
The congruence model posits that the effect of femininity and the effect of masculinity (and perhaps their interaction) will vary according to gender. In particular, femininity should contribute more than masculinity to stress scores than masculinity for females and masculinity should contribute more than femininity to stress scores for males. However, gender fails to interact with femininity, with masculinity, or with femininity-by-masculinity, for groups based on positively valued scales, negatively valued scales or their total. This lack of support is consistent across all the fourteen areas of work stress as evidenced by the nonsignificant femininity-by-Gender-by-Scale and non significant masculinity-by-Gender-by-Scale interactions.

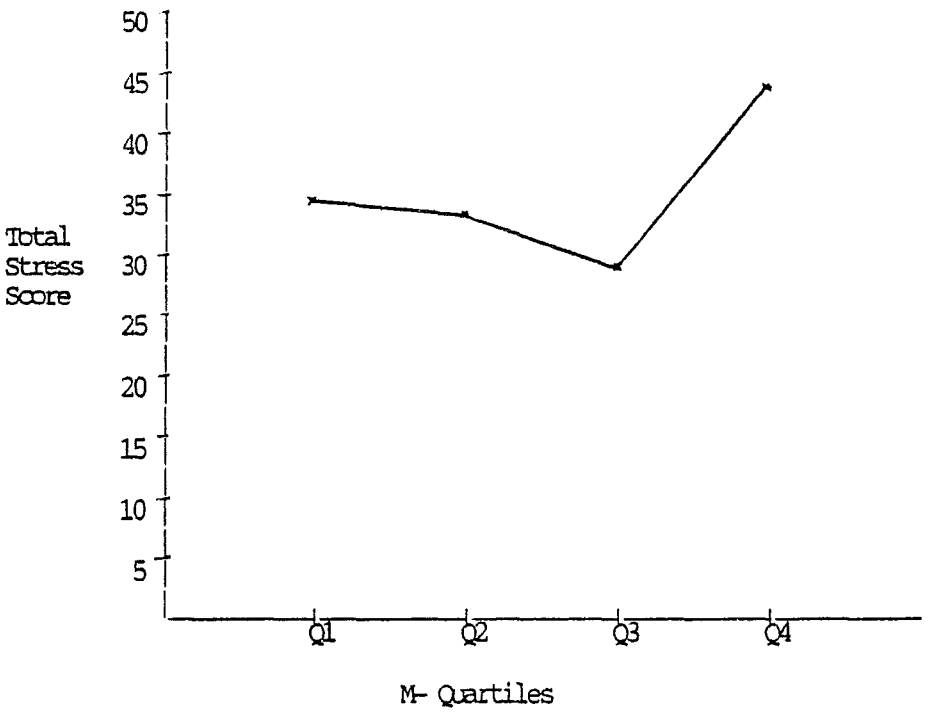
The differential androgyny model proposes that the relative contribution of masculinity and femininity will vary according to the specific facet (scale or dimension) of the criteria. The lack of femininity-by-Scale and masculinity-by-Scale interactions demonstrate no support for the differential androgyny model, hence no further investigation into the scale interaction is appropriate.

The femininity negative and masculinity negative scales demonstrate a significant effect on the pressure job holders in the sample report. High quartile levels on these two scales are significantly associated with high levels of work pressure as can be seen in Table 19 which shows the

TABLE 19

Total Stress Scores by F- and M- Quartiles.





NOTE. Quartiles are formed on the basis of the 25, 50, 75 and 100 percentiles for F- and for M-.

breakdown of TSTRESS by the 4 quartile levels of F- and M-.

In summary these ANOVA results provide no support at all for the congruence model, the interactive androgyny model and the differential androgyny model. Weak support is provided for the masculinity model in that based on negatively valued scales masculinity contributes substantially to the prediction of total stress scores, but this is confounded by a significant femininity effect. Support is observed for the additive androgyny model, restricted to negatively valued masculinity and femininity scales.

CHAPTER FIVE: DISCUSSION

Eleven distinct stressors are identified for the sample as a whole in this work stress study. Only three additional sources of stress are isolated dependent on job sector. This indicates that job holders at the grade three and four level, to a large degree, possess similar perceptions about the pressures they face in association with their work at the Bank. Two of the stressors isolated for the sample are associated with positive effects. One belongs to the quantitative overload dimension: 'There seems to be a sense of urgency about all work tasks', the other derives from the time management dimension: 'I have regular important deadlines that I have to meet in my work'. These stressors are interpreted by the sample as challenges to work accomplishment that are of an acceptable nature and bear no negative consequences. This positive effect is not surprising as it can add a sense of value and importance to the accomplishment of daily work tasks.

Underload, the underutilisation of skills and abilities, emerges as a stress dimension for the sample. Two of the three underload items are endorsed by the sample as pressures and both are associated with a reported negative effect. Endorsement of this nature indicates a need for more stimulating and skilled work in job positions at this grade level. Banking inherently involves many clerical processes of a very repetitive nature. Job rotation is seen to be providing some relief to this problematic area within the Bank. Although it may be necessary for the Bank to check whether tasks and competencies are optimally delegated

to these middle level grades. Some attention to the principles of job enlargement or job enrichment for sufficient stimulation may prove to be worthwhile and of benefit to both job holders and the Bank.

Two of the three individual identity items are also isolated as stressors: 'I feel like a small cog in a big machine' and 'I sometimes feel trapped by the system here'. Work plays a large part in establishing self-identity. Restrictions on developing self-identity may lead to stress and dissatisfaction with the organisation that may result in negative repercussions such as poor performance and withdrawal behaviours including termination of employment. This focus of organisational stress is confirmed by the sample acknowledging 'The formal organisational structure has too much red tape' as a stressor.

Communication and career development stress dimensions are represented by single items for the sample as a whole and additional emphasis is acknowledged for career development as a stressor specifically for job holders working in the areas of Typing, Customer Services and Loans. Lack of feedback, the perception of few opportunities to grow and learn new skills, and feeling at a standstill in one's career express personal discontent with the present working situation. Career development recognised as a source of stress may eventually force individuals to consider career alternatives outside the organisation and add to the turnover situation particularly if information on the possible job opportunities within branch banking and Head Office is not clear and freely available to job holders at this level in the Bank, once again this involves the matching of tasks and competencies. The Bank may also need

to provide individuals with realistic expectations about their skills and career progress.

Every employee should have clarity regarding their own work tasks and competencies, what others expect from them on the job and what career possibilities exist within the organisation. 'I am not sure of how much authority I have' and 'At work I receive conflicting demands from two or more people' stressors for the whole sample, and 'My job duties are unclear to me' a stressor specific to job holders working in Administration and Loans, suggest a great need for improvement in clarity in these areas. Clear and concise information of duties and expected results can be presented in thorough job descriptions. Clarity of this nature can bring about many positive effects including realistic expectations and self esteem which may be coupled by better performance and therefore be beneficial to both the individual and the employing organisation.

The remaining stressor isolated for specific job sectors involves quantitative overload. Too much work to complete in a normal day provides pressure for Administration, Loans, International and Other job sectors. This may reflect understaffing in these areas, lack of training and experience or the ill-allocation of work tasks to job holders and may require further attention to investigate the possible causes.

Respondents' psychological well-being (or mental health) is indicated by total GHQ scores, high scores are indicative poorer psychological well-being. The mean health score for the sample is slightly higher than means reported for other employed groups as summarised in Table 1. In terms of health scores the Bank sample in this study appear to be

very similar to Kirkpatrick and Trew's (1985) 'social life style unemployed males'. It may be that life style patterns play a moderating role for both employed and unemployed groups of males and females when health scores on the CHQ-12 are considered and this is an area which requires further investigation in order to assess this possible trend.

A small but significant relationship is observed between psychological well-being (as measured by the GHQ-12) and total stress scores. Higher levels of stress are associated with greater ill-health symptomology. The direction of causalty though can not be inferred from this ill-health/stress relationship as although high levels of stress may lead to high levels of ill-health it is also likely that low general well-being may predispose or influence the individual perception of pressure in the work environment. Two significant correlations are observed for the health score. These correlations involve the negative femininity sex role scale and the negative social desirability scale. The characteristics pertaining to negative femininity (dependent, need approval, nervous, timid, self-critical, weak, bashful, sky, anxious, worrying) and negative social desirability (tense, rash, childlike, absent-minded, silly) are associated statistically with lower levels of psychological well-being. Negative femininity is also correlated significantly with negative social desirability (r = .45).

On examination the General Health Questionnaire contains items of a similar nature to the negative femininity and negative social desirability scales such as worry, strain, overcome difficulties, unhappy and depressed. It is therefore not surprising that a positive correlations exists

between these scales. The masculinity negative scale on the other hand bears considerable less resemblance to the GHQ with the characteristics bossy, noisy, showoff, agressive, sarcastic, michievous, feel superior, boastful, rude, and see self running show. Hence a significant relationship between negative masculinity and general well-being would not be expected even though the masculinity negative scale correlates significantly with the negative social desirability scale.

There is a need to consider the possibility that the GHQ, a measure of psychological well-being, emphasises anxiety and symptomology which may possibly be associated with femininity. That is, the GHQ could be biased and findings here may be somewhat illusory.

The results of this survey research are acknowledged as indicative and not conclusive. The size of the sample is relatively small and restricted to grade three and grade four job positions within the Wellington District of the BNZ. The possibility exists that the group of respondents may differ quite significantly and have greater concerns for stress than non-participaters. Only following further research would results be able to be generalised to other Districts. Different grade levels would also require further investigation.

Results from the series of ANOVA analyses, utilised in this investigation of sex role orientation and work stress to test the five sex role models, provide support for only one model, the additive anndrogyny model. Masculinity and femininity effects are observed for stress scores but these effects are restricted to the negative sex role scales. It appears that masculine negative characteristics: bossy,

noisy, show off, aggressive, sarcastic, mischievious, feel superior, boastful, rude, and see self running show; and feminine negative characteristics: dependent, need approval, nervous, timid, self critical, weak, bashful, shy, anxious, and worrying; influence the level of stress experienced and reported by job holders in the study. Generally scores in the higher levels of masculine negative and feminine negative scales are associated with higher total stress scores.

The reportation of stress seems to be quite oblivious to the impact of positive characteristics of masculinity and femininity. The femininity negative and masculinity negative effects are completely obscured when total sex role scales are considered. These findings confirm the importance of including both positivie and negative components of masculinity and femininity in sex role inventories (Antill et al., 1981; Spence et al, 1979) and the importance of examining the subscales in the investigation of sex role models as contributing or explanatory factors. (Marsh & Myers, 1986; Russell & Antill, 1984).

Differences in work stress on the basis of gender are not supported by the results of this study. Since no gender effects or interactions obtain significance for the sample it is assumed that neither being female nor male is advantageous nor disadvantageous in this work setting with regard to job pressures (c.f., Doefler & Kammer, 1986; Jick & Mitz, 1985). The psychological importance of femininity negative attributes and masculinity negative attributes exceeds the explanatory power that is often assumed in biological gender. It appears that the socialisation

processes that develop personality characterisitcs associated with negative femininity and negative masculinity rather than the dichotomous categorisation at birth of 'boy' or 'girl' effects job holder's perceptions of stressors in the work environment.

In contrast to conclusions drawn from meta analyses and reviews concerning sex roles the masculinity model does not receive strong support (Bassoff & Glass, 1982; Taylor & Hall, 1982; Whitley, 1983, 1984). This lack of support may be perculiar to the area of work stress since this is once of the first studies to investigate the interplay of sex roles orientation and work stress. Contrasts to past research may also stem from the specific occupational samples involved in the research, the discrete hierarchical levels involved in this study or the specific sex role inventory utilised. The Personal Description Questionnaire developed by Antill et al., (1981) is a relatively new development and many researchers have yet to distinguish between the relative contribution of positive and negative components of masculine and feminine items in their research on general adjustment, depression and psychological well-being. The critical imbalance of positive and negative, masculine and feminine items in sex role inventories relied upon in sex role related research may in fact be biasing results towards the beneficiality of masculine traits.

Zeldow and Daugherty's (1987) study involving the psychosocial adjustment of medical students and Marsh's (1987) study concerning the self concept of high school students have supported the differential androgyny model. In this study of work stress however the differential

androgyny model receives no evidence of support at all. Differential effects of masculinity and femininity, based on positively valued items, negatively valued items or both, have not been exhibited for the 14 work stress dimensions studied. It would appear that the socialisation processes do not discriminate among these work stress dimensions although this outcome may be a direct consequence of the particular nature of the stress dimensions chosen in this study. The use of a global stress score does not obscure any relative contribution of masculinity and femininity on the basis of dimensions. With femininity negative and masculinity negative effects for reported pressure programmes focusing on positive self awareness and assertiveness in relation to work situations are implicated to be of benefit to job holders as these may help minimise the impact of negative sex role attributes on perceived pressure.

Following up the suggestion to include sex role theory in the study of work stress to enable greater understanding of the social-psychological explanation of sex differences (Jick & Mitz, 1985) has been both interesting and worthwhile. Attributes of femininity negative and masculinity negative are observed to exert a significant effect on the stress scores of the sample involved in this thesis research supporting the involvement of socialization process in the perception of stressors in a working environment. This is a relatively new area of study and it remains to be seen if these results can be replicated for different levels in the Bank as well as other occupational groups. Socialisation processes may also effect the coping behaviours associated with work stress and this is another

area which warrants further investigation.

The author is particularly interested in the future analysis of work stress and sex roles among different hierarchical organisational levels which would not only extend the investigation of social psychological explanation but could also encompass comparisons to the explanation offered by the structural model which focuses on the specific work roles assigned to men and women.

REFERENCES

Adams, C. H., & Sherer, M. (1985). Sex role orientation and psychological adjustment: Implications for the masculinity model. Sex Roles, 12, 1211-1218.

Antill, J. K., & Cunningham, J. D. (1979). Self esteem as a function of masculinity in both sexes. Journal of Consulting and Clinical Psychology, 47, 783-785.

Antill, J. K., Cunningham, J. D., Russell, G., & Thompson, N. L. (1981). An Australian sex role scale. Australian Journal of Psychology, 33, 169-183.

Banks, M. H. (1983). Validation of the General Health Questionnaire in a young community sample. Psychological Medicine, 13, 349-353.

Banks, M. H., Clegg, C. W., Jackson, P. R., Kemp, N. J., Stafford, E. M., & Wall, T. D. (1980). The use of the General Health Questionnaire as an indicator of mental health in occupational settings. Journal of Occupational Psychology, 53, 187-194.

Banks, M. H., & Jackson, P. R. (1982). Unemployment and risk of minor psychiatric disorders in young people: Cross sectional and longitudinal evidence. Psychological Medicine, 12, 789-798.

Bassoff, E. S., & Glass, G. V. (1982). The relationship between sex roles and mental health: A meta-analysis of twenty-six studies. Counselling Psychologist, 10, 105-112.

Bem, S. L. (1974). The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 42, 155-162.

Bem, S. L. (1977). On the utility of alternative proceedures for assessing psychological androgyny. Journal of Consulting and Clinical Psychology, 45, 196-205.

Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. Psychological Review, 88, 354-364.

Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., & Vogel, S. R. (1970). Sex role stereotypes and clinical judgments of mental health. Journal of Consulting and Clinical Psychology, 34, 1-7.

Bryson, J. (1984). Work stress: A study of pressures and satisfactions throughout an organisation's hierarchy. Unpublished thesis. Canterbury University, New Zealand.

Cate, R., & Sugawara, A.(1986). Sex role orientation and dimensions of self esteem among middle adolescents. Sex Roles, 15, 145-148.

Chan, K. B. (1977). Individual differences in reactions to stress and their personality and situational determinants: Some implications for community health. Social Science and Medicine, 11, 89-103.

Chesney, M. A., & Rosenman R. H. (1980). Type A behaviour in the work setting. In C. L. Cooper & R. Payne (Eds.), Current concerns in occupational stress (Chapter 7). Chichester: Wiley.

Cline, D. W., & Chosy, J. J. (1972). Prospective-study of life changes and subsequent health changes. Archives of General Psychiatry, 27, 51.

Conkite, R. C., & Moos, R. H. (1984). The role of predisposing and moderating factors in the stress - illness relationship. Journal of Health and Social Behaviour, 25, 372-393.

Constantinople, A. (1973). Masculinity - femininity: An exception to a famous dictum? Psychological Bulletin, 80, 389-407.

Cooper, C. L., & Marshall, J. (1976). Occupational sources of stress: A review of the literature relating to coronary heart disease and mental ill helath. Journal of Occupational Psychology, 49, 11-28.

Corlett, E. N., & Richardson, J. (Eds.). (1981). Stress, work design and productivity. Chichester: Wiley.

Crabbs, S. M. A., Black, K. U., & Shelby, P. (1986). Stress at work: A comparison of men and women. Journal of Employment Counselling, 23, 2-8.

Davidson, M. J., & Cooper, C. L. (1984). She needs a wife: Problems of woman managers. Leadership and Organisation Development Journal, 5(3), 3-30.

Davidson, M. J., & Cooper, C. L. (1986). Executive women under pressure. International Review of Applied Psychology, 35, 301-326.

Deaux, K. (1977). Sex differences. In T. Blass (Ed.). Personality variables in social behaviour (pp. 357-377). Hillsdale, NJ: Erlbaum.

Deaux, K. (1984). From individual differences to social categories: Analysis of a decade's research on gender. American Psychologist, 39, 105-116.

Deaux, K., White, L., & Farris, E. (1975). Skill versus luck: Field and laboratory studies of male and female preferences. Journal of Personality and Social Psychology, 32, 629-636.

Doefler, M. C.,& Kammer, P. P. (1986). Workaholism, sex and sex role stereotyping among female professionals. Sex Roles, 14, 551-560.

Farnill, D., & Ball, I. L. (1985). Male and female factor structures of the Australian Sex Role Scale (Form A). Australian Psychologist, 20, 205-213.

Firth, J. (1985). Personal meanings of occupational stress: Cases from the clinic. Journal of Occupational Psychology, 58, 139-148.

Fischer, H. (1985). State of health and stress factors in occupation: The mass media profession. Social Science and Medicine, 21, 1367-1371.

Fraser, T. M. (1983). Human stress, work, and job satisfaction: A critical approach. Occupational safety and Health Series, 50, ILO.

French, J. R. P., & Caplan, R. D. (1972). Organisational stress and individual strain. In: Marrow, A. J., (Ed.). The failure of success. New York: Amacon, 30-67.

Friedman, M., & Rosenman, R. (1974). Type A behaviour and your heart. New York: Alfred A. Knopf.

Fuqua, R., & Couture, K. (1986). Burnout and locus of control in child day care staff. Child Care Quarterly, 15(2), 98-109.

Galloway, D., Panckhurst, F., Boswell, K., Boswell, C., & Green, K. (1984). Mental health, absences from work, stress and satisfaction in a sample of New Zealand primary school teachers. Australian and New Zealand Journal of Psychiatry, 18(4), 359-363.

Gilbert, L. A. (1981). Toward mental health: The benefits of psychological androgyny. Professional Psychology, 12, 29-38.

Gmelch, W. H. (1983). Beyond stress to effective management. New York: Wiley.

Goldberg, D. (1972). The detection of psychiatric illness by questionnaire. London: Oxford University Press.

Gore, S., & Mangione, T. (1983) Social roles, sex roles and psychological distress: Additive and interactive models of sex differences. Journal of Health and Social Behaviour, 24, 300-312.

Gough, H. G., & Heilbrun, A. B. (1965). Manual for the Adjective Check List and the Need scales for the ACL. California: Consulting Psychologists Press.

Grimm, L. G., & Yarnold, P. R. (1985). Sex typing and the coronary-prone behaviour pattern. Sex Roles, 12, 171-178.

Gupta, N., & Beehr, T. A. (1979). Job stress and employees behaviour. Organisational Behaviour and Human Performance, 23, 373-387.

Haw, M. A. (1982). Women, work and stress: A review and agenda for the future. Journal of Health and Social Behaviour, 23, 132-144.

Haynes, S. G., & Feinleib, M. (1980) Women, work and coronary heart disease: Prospective findings from the Framingham heart study. American Journal of Public Health, 70, 133-141.

Heilbrun, A. B. (1976). Measurement of masculine and feminine sex role identities as independent dimensions. Journal of Consulting and Clinical Psychology, 44, 183-190.

Heins, M., Fahey, S. N., & Leiden, L. I. (1984). Perceived stress in medical, law and graduate students. Journal of Medical Education, 59, 169-179.

House, J. S. (1974). Occupational stress and coronary heart disease: A review and theoretical integration. Journal of Health and Social Behaviour, 15, 12-27.

Ivancevich, J. M., & Matteson, M. T. (1980). Stress at work: A managerial perspective. USA: Scott Foresman & Co.

Jamal, M. (1984). Job stress and job performance controversy: An empirical assessment. Organisational Behaviour and Human Performance, 33, 1-21.

Jick, T. D., & Mitz, L. F. (1985). Sex differences in work stress. Academy of Management Review, 10, 408-420.

Jones, S. L., & Lambke, L. K. (1985). The relationship between sex role orientation, self esteem and sex typed occupation choice of college women. Psychology of Women Quarterly, 9, 145-152.

Jones, W. H., Chernovetz, M. E., & Hansson, R. O. (1978). The enigma of androgyny: Differential implications for males and females? Journal of Consulting and Clinical Psychology, 46, 298-313.

Kahn, L. (1970). Some propositions towards a researchable conceptualisation of stress. In: McGrath, J. W. (Ed.). Social and psychological factors of stress. New York: Holt, Rinehart and Winston, 97-104.

Kahn, R. L., Wolfe, D. M., & Quinn, R. P. (1964). Organisational stress: Studies in role conflict and ambiguity. New York: Wiley.

Kasl, S., & Cobb, S. (1970). Blood pressure changes in men undergoing job loss: A preliminary report. Psychosomatic Medicine, 32, 19-38.

Keenan, A., & Newton, T. J. (1985). Stressful events, stressors and psychological strains in young professional engineers. Journal of Occupational Behaviour, 6, 151-156.

Kessler, R., & McRae, J., Jr. (1981). Trends in the relationship between sex and psychological distress: 1957 - 1976. American Sociological Review, 46, 443-452.

Keys, D. E. (1985). Gender, sex role, and career decision making of certified management accountants. Sex Roles, 13, 33-46.

Kirkpatrick, R., & Trew, K. (1985). Life styles and psychological wellbeing among unemployed men in Northern Ireland. Journal of Occupational Psychology, 58, 207-216.

Krause, N., & Stryker, S. (1984). Stress and wellbeing: The buffering role of locus of control beliefs. Social Science and Medicine, 18, 783-790.

Lee, A. G., & Scheurer, V. L. (1983). Psychological androgyny and aspects of self image in women and men. Sex Roles, 9, 289-306.

Lefcourt, H. M., Martin, R. A., & Salch, W. E. (1984). Locus of control and social support: Interactive moderators of stress. Journal of Personality and Social Psychology, 47, 378-389.

Lubinski, D., Tellegan, A., & Butcher, J. N. (1983). Masculinity, femininity and androgyny viewed and assessed as distinct concepts. Journal of Personality and Social Psychology, 44, 428-439.

Maccoby, E. E., & Jacklin, C. N. (1974). The psychology of sex differences. Stanford, CA: Stanford University Press.

McGrath, J. E. (1976). Stress and behaviour in organisations. In: Dunnette, M. D. (Ed.). Handbook of industrial and organisational psychology. Chicago: Rand McNally, pp. 1351-1396.

Marino, K. E., & White, S. E. (1985). Departmental structure, locus of control and job stress: The effects of a moderator. Journal of Applied Psychology, 70, 782-784.

Marsh, H. W. (1987). Masculinity, femininity and androgyny: Their relations with multiple dimensions of self concept. Multivariate Behavioural Reasearch, 22, 91-118.

Marsh, H. W., & Myers, M. R. (1986). Masculinity, femininity and androgyny: A methodological and theoretical critique. Sex Roles, 14, 397-430.

Marshall, J., & Cooper, C. L. (1979). Executives under pressure. London: Macmillan.

Marshall, J., & Cooper, C. L., (1981). (Eds.), Coping with stress at work: Case studies from industry. Gower.

Marx, M. B., Gavrity, T. F., & Barnes, F. R. (1975). Influence of recent life experience on health of college freshmen. Journal of Psychosomatic Research, 19, 87-98.

New Zealand Official Yearbook. 1987-1988. Department of Statistics, Wellington, New Zealand, pp. 331-335.

Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Brent, D. H. (1975). SPSS: Statistical package for the social sciences. USA: McGraw-Hill.

Parker, D. F., & De Cotiis, T. A. (1983). Organisational determinants of job stress. Organisational Behaviour and Human Performance, 32, 160-177.

Payne, R. (1980). Organisational stress and social support. In C. L. Cooper & R. Payne (Eds.), Current concerns in occupational stress. (Chapter 10). Chichester: Wiley.

Posner, I., Lester, D., & Leitner, L. A. (1984). Stress in nurses and other working females. Psychological Reports, 54, 210.

Powell, G. (1982). Sex role identity and sex: An important distinction for research on women in management. Basic and Applied Social Psychology, 3, 67-79.

Quick, J. C., & Quick, J. D. (1984). Organisational stress and preventive management. USA: McGraw-Hill.

Ray, J. J., & Lovejoy, F. H. (1984). The great androgyny myth: Sex roles and mental health in the community at large. Journal of Social Psychology, 124(2), 237-246.

Richmond, L. J., Rayburn, C., & Rogers, L. (1985). Clergymen, clergywomen and their spouses: Stress in professional religious families. Journal of Career Development, 12, 81-86.

Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I., & Broverman, D. M. (1968). Sex role stereotypes and self concepts in college students. Journal of Consulting and Clinical Psychology, 32, 287-295.

Rotheram, M. J., & Weiner, N. (1983). Androgyny, stress and satisfaction: Dual career and traditional relationships. Sex Roles, 9, 151-158.

Russell, G., & Antill, J. (1984). An Australian sex role scale: additional psychometric data and correlations with self esteem. Australian Psychologist, 19, 13-18.

Spence, J. T., & Helmreich, R. C. (1978). Masculinity and femininity: Their psychological dimensions, correlates and antecedents. Austin: University of Texas Press.

Spence, J. T., Helmreich, R. L., & Holahan, C. K. (1979). Negative and positive components of psychological masculinity and femininity and their relationships to self reports of neurotic and acting out behaviours. Journal of Personality and Social Psychology, 37, 1673-1682.

Spence, J., Helmreich, R., & Stapp, J. (1975). Ratings of self and peers on sex role attributes and their relation to self esteem and conceptions of masculinity and femininity. Journal of Personality and Social Psychology, 32, 29-39.

SPSSX, Statistical algorithms (1983). Chicago: SPSS Inc.

Stevens, M. J., Pfost, K. S., & Ackerman, M. D. (1984). The relationship between sex role orientation and the Type A behaviour pattern: A test of the main effect hypothesis. Journal of Clinical Psychology, 40, 1338-1341.

Taylor, M. C., & Hall, J. A. (1982). Psychological androgyny: A review and reformulation of theories, methods and conclusions. Psychological Bulletin, 92, 347-366.

Touliatos, J., Bedeian, A. G., Mossholder, K. W., & Barkman, A. I. (1984). Job related perceptions of male and female government, industrial and public accountants. Social Behaviour and Personality, 12, 61-68.

Wech, B. A. (1983). Sex role orientation, stress and subsequent health status demonstrated by two scoring procedures for the Bem scale. Psychological Reports, 52, 69-70.

Weiss, H. M., Ilgen, D. R., & Sharbaugh, M. E. (1982). Effects of life and job stress on information search behaviours of organisational members. Journal of Applied Psychology, 67, 60-66.

Whitley, B. E., Jr. (1983). Sex role orientation and self esteem: A critical meta-analytic review. Journal of Personality and Social Psychology, 44, 765-778.

Whitley, B. E., Jr. (1984). Sex role orientation and psychological wellbeing: Two meta-analyses. Sex Roles, 12, 207-225.

Winnubst, J. A. M. (1984). Stress in orgnisations In: Drenth P. J. D., Thierry, H., Willems, P. J., & de Wolff, C. J. (Eds.) Handbook of work and organisational psychology. John Wiley & Sons, Ltd.

Wong, P. T., Kettlewell, G. E., & Sproule, C. F. (1985). On the importance of being masculine: Sex role attribution and women's career achievement. Sex Roles, 12, 757-769.

Zeldow, P. B., Daugherty, S. R., & Clark, D. C. (1987). Masculinity, femininity and psychosocial adjustment in medical students: A two year follow-up. Journal of Personality Assessment, 51, 3-14.

APPENDIX I

The Survey Questionnaire

Dear Job Holder,

I am a postgraduate student interested in people and the pressures people experience in their employment. The attached survey questionnaire is an important and essential part of my thesis research work in this area.

It would be greatly appreciated if you would participate in my study by completing this survey and returning it in the envelope provided by Friday 25 September, 1987.

Thank you for your cooperation.

Lynn Dryburgh.
RESEARCHER

			1

SURVEY OF JOB HOLDERS AND THEIR JOB PRESSURES

This survey is about you and some of the pressures you experience in your work.

You will be asked to describe yourself and respond to some work related situations and features that may be present in your job.

Please complete this survey as honestly as you can. All information and opinions which you may express will remain entirely CONFIDENTIAL AND ANONYMOUS.

This is not a test, there are no right or wrong answers. You will find completion easiest if you complete the survey fairly swiftly.

Please print all of your responses clearly.

JOB PRESSURES

What pressures do you have at work?

Listed on the following pages are a number of work related features and situations. Please indicate the level of pressure you experience from each work feature.

Mark 1 if you feel no pressure
2 if you feel slight pressure
3 if you feel moderate pressure
4 if you feel extreme pressure

It is possible that the level of pressure you experience may have a positive, neutral or negative effect on you. Please also indicate how you feel the level of pressure affects you for each of the work related features.

Mark 1 if a positive effect on you
2 if a neutral, no effect on you
3 if a negative effect on you

Here is an example:

PRESSURE

1 = I feel NO pressure
2 = I feel SLIGHT pressure
3 = I feel MODERATE pressure
4 = I feel EXTREME pressure

EFFECT

1 = POSITIVE effect on me
2 = NEUTRAL, NO effect on me
3 = NEGATIVE effect on me

Work feature	Pressure 1 2 3 4	Effect 1 2 3
I frequently spend evenings and weekends finishing my work	3	3

In this case the response "3" for pressure indicates that you experience moderate pressure from this work feature and the "3" for effect indicates that this has a negative effect on you.

Please answer the items on the next 3 pages in a similar way.

PRESSURE

1 = I feel NO pressure
2 = I feel SLIGHT pressure
3 = I feel MODERATE pressure
4 = I feel EXTREME pressure

EFFECT

1 = POSITIVE effect on me
2 = NEUTRAL, NO effect on me
3 = NEGATIVE effect on me

Work features	Pressure 1 2 3 4	Effect 1 2 3
1 My job duties are unclear to me		
2 At work I receive conflicting demands from two or more people		
3 I have more work to do than can be done in a normal working day		
4 I often have difficulty in deciding between high productivity and high quality of work		
5 I find my skills and/or abilities are not being well used at work		
6 It is often difficult to keep to a daily schedule in my work		
7 I feel that I am at a standstill in my career		
8 An overabundance of rules and policies do not allow me the freedom to make my own decisions or use my own ideas at work		
9 I don't have rights to a private work area in this organisation		
10 Sometimes I have difficulty in communicating with my supervisor		
11 I am not part of a close-knit work group		
12 I feel that working for this company imposes restrictions on my behaviour		
13 It seems that my work is sometimes overlooked for no good reason		
14 My colleagues sometimes make remarks and/or gestures which are directed at me and which are of a sexual nature		
15 I do not fully understand what is expected of me in my job		
16 I do things on the job that are acceptable to one person and not to another		

PRESSURE

1 = I feel NO pressure
2 = I feel SLIGHT pressure
3 = I feel MODERATE pressure
4 = I feel EXTREME pressure

EFFECT

1 = POSITIVE effect on me
2 = NEUTRAL, NO effect on me
3 = NEGATIVE effect on me

Work features	Pressure 1 2 3 4	Effect 1 2 3
17 My job responsibilities are difficult to keep up with		
18 The organisation expects more of me than my skills and/or abilities can meet		
19 My job is seldom challenging		
20 I have regular important deadlines that I have to meet in my work		
21 I have few opportunities to grow or learn new skills in this organisation		
22 The formal organisational structure has too much red tape		
23 My work area is abnormally noisy		
24 There is little opportunity to receive feedback on how I am doing in my job		
25 My colleagues are highly competitive		
26 I feel like a small cog in a big machine		
27 I feel that others tend to treat me/my work differently because of my sex		
28 When talking to a colleague of the opposite sex I am aware of sexual overtones in the discussion		
29 I am not sure of how much authority I have		
30 I work on unneccessary tasks or projects		
31 There seems to be a sense of urgency about all work tasks		
32 My assigned work tasks are sometimes too difficult and/or too complex		
33 I frequently find my work boring and repetitive		
34 I am not sure that I have divided my time properly among tasks at work		

2

PRESSURE

1 = I feel NO pressure
2 = I feel SLIGHT pressure
3 = I feel MODERATE pressure
4 = I feel EXTREME pressure

EFFECT

1 = POSITIVE effect on me
2 = NEUTRAL, NO effect on me
3 = NEGATIVE effect on me

Work features	Pressure 1 2 3 4	Effect 1 2 3
35 I lack the proper opportunities to advance in this organisation		
36 A person at my level has little control over the job		
37 The equipment available for completing work is poor		
38 I cannot talk easily with my colleagues		
39 I find I don't get much support from my work group		
40 I sometimes feel trapped by the system here		
41 I don't seem to get the same job opportunities as others		
42 I feel that I am sometimes treated as a sexual object rather than as a colleague		
43 Are there other situations that have not been mentioned which you feel are job pressures? Please write a brief statement to describe the situation(s) and then indicate the level of pressure and the nature of effect as for the other situations.		

PERSONAL DESCRIPTION

This task asks you to describe yourself. Below is a list of characteristics. Please use these to describe yourself. Indicate on a scale of 1 to 7 how true of you these various characteristics are. Please do not leave any characteristic unmarked.

For example: | Happy | |

Mark 1 if it is NEVER OR ALMOST NEVER TRUE that you are happy
2 if it is USUALLY NOT TRUE that you are happy
3 if it is SOMETIMES BUT NOT INFREQUENTLY TRUE that you are happy
4 if it is OCCASIONALLY TRUE that you are happy
5 if it is OFTEN TRUE that you are happy
6 if it is USUALLY TRUE that you are happy
7 if it is ALWAYS OR ALMOST ALWAYS TRUE that you are happy

Thus if you feel that it is SOMETIMES BUT INFREQUENTLY TRUE that you are happy, you should write "3" next to happy: | Happy | 3 |

1 NEVER OR ALMOST NEVER TRUE — 2 USUALLY NOT TRUE — 3 SOMETIMES BUT INFREQUENTLY TRUE — 4 OCCASIONALLY TRUE — 5 OFTEN TRUE — 6 USUALLY TRUE — 7 ALWAYS OR ALMOST ALWAYS TRUE

Love children		Competitive		Childlike	
Firm		Casual		Anxious	
Dependent		Timid		Devote self to others	
Patient		Self-critical		Feel superior	
Tense		Logical		Boastful	
Bossy		Grateful		Loyal	
Noisy		Sarcastic		Strong	
Need approval		Forceful		Carefree	
Rash		Clear-thinking		Absent-minded	
Show-off		Weak		Rude	
Interesting		Bashful		See self running show	
Appreciative		Mischievous		Outspoken	
Nervous		Responsible		Worrying	
Sensitive to the needs of others		Emotional		Gentle	
Aggressive		Resourceful		Silly	
Confident		Skilled in business		Pleasure seeking	
Self-sufficient		Shy			

3

GENERAL HEALTH

This section asks you to indicate how you have been feeling in general over the past few weeks.

For each item select the code number that best describes your feelings and print it clearly in the box provided.

CODES FOR ITEMS 1 TO 6 ARE :
0 = not at all
1 = no more than usual
2 = rather more than usual
3 = much more than usual

Have you recently :

1. lost much sleep over worry?	
2. felt constantly under strain?	
3. felt you couldn't over come your difficulties?	
4. been feeling unhappy and depressed?	
5. been losing confidence in yourself?	
6. been thinking of yourself as a worthless person?	

CODES FOR ITEMS 7 TO 12 ARE :
0 = more so than usual
1 = same as usual
2 = less so than usual
3 = much less than usual

Have you recently :

7. felt that you are playing a useful part in things?	
8. felt capable of making decisions about things?	
9. been able to enjoy your normal day-to-day activities?	
10. been able to face up to your problems?	
11. been feeling reasonably happy all things considered?	
12. been able to concentrate on whatever you're doing?	

GENERAL INFORMATION

Please supply the following information about yourself and your current job position by printing the correct code number in the box provided.

For example:

Today I arrived at work.....	

1 = early
2 = on time
3 = late

If your response is " on time " then you would print a "2" in the code box for this statement

Today I arrived at work.....	2

Now please complete items 1 to 9 in the same manner.

1. The age group that I belong to is.....	

1 = under 20 years
2 = 20 - 24 years
3 = 25 - 29 years
4 = 30 - 34 years
5 = 35 - 39 years
6 = 40 - 45 years
7 = 45 - 50 years
8 = 50 years or older

2. Sex.....	

1 = female
2 = male

3. Present marital status.....	

1 = single
2 = married or defacto relationship
3 = separated or divorced
4 = widowed

4. I am employed.....	

1 = temporary
2 = part-time
3 = full-time

5. I have been with this organisation for...

1 = less than 1 year
2 = 1 - 2 years
3 = 2 - 3 years
4 = 3 - 4 years
5 = 4 - 5 years
6 = 5 years or more

6. My job is .....

3 = grade 3
4 = grade 4

7. I work in .....

1 = a branch
2 = a district office
3 = head office

8. My work is in .....

1 = administration
2 = typing
3 = customer services
4 = loans
5 = international

9. I have been in this position for.....

1 = 0 - 6 months
2 = 6 - 12 months
3 = 1 - 2 years
4 = 2 - 3 years
5 = 3 - 4 years
6 = 4 - 5 years
7 = 5 years or more

Thank you for your participation in this job holders and job pressures survey.

Results of this study will be avaliable in October and will be circulated to all participants.

If you have any comments that you would like to make please use the space provided below.

Thank you once again for your cooperation.

Lynn Dryburgh.
RESEARCHER.

Comments: _____

This page was substituted for Head Office questionnaires

5. I have been with this organisation for... [ ]

1 = less than 1 year
2 = 1 - 2 years
3 = 2 - 3 years
4 = 3 - 4 years
5 = 4 - 5 years
6 = 5 years or more

6. My job is ..... [ ]

3 = grade 3
4 = grade 4

7. My division is _____

(please supply answer)

8. My work mainly involves ..... [ ]

1 = administration
2 = typing
0 = other

9. I have been in this position for..... [ ]

1 = 0 - 6 months
2 = 6 - 12 months
3 = 1 - 2 years
4 = 2 - 3 years
5 = 3 - 4 years
6 = 4 - 5 years
7 = 5 years or more

APPENDIX II

The Fourteen Work Stress Dimensions.

JOBAMB: Job Ambiguity

1	My job duties are unclear to me
15	I do not fully understand what is expected of me in my job
29	I am not sure of how much authority I have

ROLECON: Role Conflict

2	At work I receive conflicting demands from two or more people
16	I do things on the job that are acceptable to one person and not to another
30	I work on unnecessary tasks or projects

QUANT: Quantitative Overload

3	I have more work to do than can be done in a normal day
17	My job responsibilities are difficult to keep up with
31	There seems to be a sense of urgency about all work tasks

QUAL: Qualitative Overload

4	I often have difficulty in deciding between high productivity and high quality of work
18	The organisation expects more of me than my skills and/or abilities can meet
32	My assigned work tasks are sometimes too difficult and/or too complex

UNDER: Underload

5	I find my skills and/or abilities are not being well used at work
19	My job is seldom challenging
33	I frequently find my work boring and repetitive

TIME: Time Management

6 It is often difficult to keep to a daily schedule in my work
20 I have regular important deadlines that I have to meet in my work
34 I am not sure that I divide my time properly among tasks at work

CARDEV: Career Development

7 I feel that I am at a standstill in my career
21 I have few opportunities to grow or learn new skills in this organisation
35 I lack the proper opportunities to advance in this organisation

ORGST: Organisational Structure

8 An over abundance of rules and policies do not allow me the freedom to use my own ideas at work
22 The formal organisational structure has too much red tape
36 A person at my level has little control over the job

ENVIR: Environmental Conditions

9 I don't have rights to a private work area in the organisation
23 My work area is abnormally noisy
37 The equipment available for completing work is poor

COMM: Communication

10 Sometimes I have difficulty in communicating with my supervisor
24 There is little opportunity to receive feedback on how I am doing in my job
38 I cannot talk easily with my colleagues

FISO: Feeling Isolated

11 I am not part of a close-knit work group
25 My colleagues are highly competitive
39 I find I don't get much support from my work group

INDIV: Individual Identity

12	I feel that working for this company imposes restrictions on my behaviour
26	I feel like a small cog in a big machine
40	I sometimes feel trapped by the system here

DISCR: Discrimination

13	It seems that my work is sometimes overlooked for no good reason
27	I feel that others treat me/my work differently because of my sex
41	I don't seem to get the same job opportunities as others

SEXHA: Sexual Harassment

14	My colleagues sometimes make remarks and/or gestures which are directed at me and which are of a sexual nature
28	When talking to a colleague of the opposite sex I am aware of sexual overtones in the discussion
42	I feel that I am sometimes treated as a sexual object rather than as a colleague

APPENDIX III

Personal Description Questionnaire

Form A (Antill et al, 1981)

Love children	F+	Competitive	M+	Childlike	S-
Firm	M+	Casual	M+	Anxious	F-
Dependent	F-	Timid	F-	Devote self to others	F+
Patient	F+	Self-critical	F-	Feel superior	M-
Tense	S-	Logical	S+	Boastful	M-
Bossy	M-	Grateful	F+	Loyal	F+
Noisy	M-	Sarcastic	M-	Strong	M+
Need approval	F-	Forceful	M+	Carefree	M+
Rash	S-	Clear-thinking	S+	Absent-minded	S-
Show-off	M-	Weak	F-	Rude	M-
Interesting	S+	Bashful	F-	See self running show	M-
Appreciative	F+	Mischievous	M-	Outspoken	M+
Nervous	F-	Responsible	F+	Worrying	F-
Sensitive to the needs of others	F+	Emotional	F+	Gentle	F+
Aggressive	M-	Resourceful	S+	Silly	S-
Confident	M+	Skilled in business	M+	Pleasure seeking	M+
Self-sufficient	S+	Shy	F-		

APPENDIX IV

The Prompt

Lynn Dryburgh
8 Weld Street
Wadestown
WELLINGTON 1

Dear Job Holder,

I would like to remind you of the SURVEY OF JOB HOLDERS AND THEIR JOB PRESSURES distributed last week.

This research study is dependent upon the completion and the return of questionnaires in order to provide an understanding of the pressures people like you face at work. Your reactions, ideas and opinions are very important. One hundred questionnaires have been completed and returned, if one of these is yours - THANKYOU.

If you have not already done so please complete the questionnaire and return it in the mail as soon as possible. Questionnaires will be accepted up until September 30. Your cooperation will be greatly appreciated.

Yours sincerely,

Lynn Dryburgh
RESEARCHER

APPENDIX V

Results Circulated to Respondents

SURVEY OF JOB HOLDERS AND THEIR JOB PRESSURES

THE RESULTS

250 questionnaires were distributed to BNZ employees at grade 3 and grade 4 during September. A total of 135 useable questionnaires were obtained and analysed; 105 from BNZ branches in the Wellington District, 30 from divisions at Head Office. A respose rate of 54%.

74% of job holders in the sample are Grade 4 and 96% are in full time positions. Females made up 66% of the sample and the age group composition is as follows:

Under 20 years	14%
20 - 24 years	56%
25 - 29 years	19%
30 years plus	10%

Most people had been with the BNZ for at least 2 years, with 31% reporting tenures of 5 years or more. The sample was examined in terms of the following job sectors:

Administration	10%
Typing	8%
Customer Services	23%
Loans	21%
International	21%
Other eg. specialist	17%

JOB PRESSURES - Eleven key job pressures, listed below with the associated effect, were reported throughout the sample (endorsed by at least 60% of respondents as a pressure).

JOB PRESSURES FOR THE WHOLE SAMPLE	EFFECT
I have regular important deadlines to meet	POSITIVE
There seems to be a sense of urgency about all work tasks	POSITIVE
I sometimes feel trapped by the system here	NEGATIVE
At work I receive conflicting demands from two or more people	NEGATIVE
The formal organisational structure has too much red tape	NEGATIVE
There is little oppportunity to receive feedback on how I am doing in my job	NEGATIVE
I frequently find my work boring and repetitive	NEGATIVE
My job is seldom challenging	NEGATIVE
I feel like a small cog in a big machine	NEGATIVE
I am not sure how much authority I have	NEGATIVE
I have few opportunities to grow or learn new skills in this organisation	NEGATIVE

Three job pressures are reported by job holders in particular job sectors.

JOB PRESSURES (SPECIFIC JOB SECTORS)	EFFECT
I have more work to do than can be done in normal working day (Administration, Loans, International, Other)	NEGATIVE
I feel that I am at a standstill in my career (Typing, Customer Services, Loans)	NEGATIVE
My job duties are unclear to me (Loans, Administration)	NEGATIVE

HEALTH - The short health inventory included in the questionnaire has been used in a number of overseas studies. The mean score for the sample is 12.01, slightly higher than overseas studies of employed groups. Note that a high score is indicative of low well being or ill health. No differences were found on the basis of gender or job sector. Ill health was found to be associated with the amount of pressure reported.

PERSONAL DESCRIPTION - The Personal Description section in the survey is designed to measure personality attributes of femininity and masculinity. Note, that regardless of biological gender a person may posess a certain degree of femininity and a certain degree of masculinity. This study set out to examine the relationships between femininity, masculinity and work pressure.

It was found that femininity-negative scale scores and masculine-negative scale scores have a significant effect on the pressure reported by job holders. High scores on these scales were significantly associated with high levels of work pressure.

Femininity-negative items are: Dependent, Need approval, Nervous, Timid, Self-critical, Weak, Bashful, Shy, Anxious, and Worrying.

Masculinity-negative items are: Bossy, Noisy, Show-off, Aggressive, Sarcastic, Mischievous, Feel superior, Boastful, Rude, and See self running show.

This is a relatively new area of study and it remains to be seen if these results can be repeated with other samples and for different occupational groups.

I EXTEND MY SINCEREST THANKS TO ALL THOSE PEOPLE WHO PARTICIPATED IN THIS SURVEY STUDY, WITHOUT YOUR COOPERATION THIS STUDY WOULD NOT HAVE BEEN POSSIBLE - THANK YOU!

LYNN DRYBURGH

APPENDIX VI

Extra Job Pressures

Listed below are the extra job pressures reported by subjects in response to the open ended question in the Job Pressures section of the Job Holders and Their Job Pressures Questionnaire. Subjects' code and responses on the PRESSURE and EFFECT scales are included.

PRESSURE

1 = I feel NO pressure.
2 = I feel SLIGHT pressure.
3 = I feel MODERATE pressure.
4 = I feel EXTREME pressure.

EFFECT

1 = POSITIVE effect on me.
2 = NEUTRAL, NO effect on me.
3 = NEGATIVE effect on me.

SUBJECT CODE	EXTRA JOB PRESSURES REPORTED	PRESSURE	EFFECT
004	Lack of interest/abilities in colleagues	4	3
027	Working through lunch hours with short staff	3	3
027	Lack of knowledge, with staff not knowing or can't be bothered learning	4	3
027	Incompetence in staff (laziness)	3	3
046	My wages do not compare well with similar industries	3	3
059	Management not supporting staff work decisions	4	3
070	I find the area I work in too hot or too cold	4	3
070	Ideas I come up with are ignored	4	3
070	People waste my time	4	3
079	Abusive or rude customers	3	3
090	Being in the same branch too long	1	3
103	Because I can't get my daily work done I find it hard to be pleasant and helpful to customers	4	3

SUBJECT CODE	EXTRA JOB PRESSURES REPORTED	PRESSURE	EFFECT
108	There are areas of work I find hard to refer to others as they lack information I need - no back up	3	3
108	With increase of work load non-urgent/important work is constantly deferred	3	3
108	I have to turn my attention away from my special jobs to help those I supervise as they have not had enough training	3	3
108	I feel that if I leave a task someone's going to walk in and reprimand my actions	3	3
124	Being taken for granted	3	3
132	Putting up with bitchiness (gossip etc)	3	3
229	Asking people for help in areas that you know nothing about, then having them treat you as a complete idiot	4	3
235	Various departments don't work smoothly together - as if we all work for different organisations	3	3
235	High staff turnover means new, improperly trained staff make unnecessary errors causing more work for other departments	3	3
238	Lack of communication from management level about personnel transfers eg. how long you will be in your current job	3	3
238	I feel that many male colleagues do not want women in management positions	3	3
245	I do work which is not in my job description because no-one-else is able to do it	4	3
247	Lack of communication	4	3
250	I find my tertiary qualification causes a natural bias to my work	4	3